A Couple of Changes to Mention

GEOG 4230: Location Intelligence

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1. Topic Resequencing Proposal

- **Current order of topics (Weeks 4-11)**
  - Week 4 (Feb 4, 6) Geography, Data Science
  - Week 5 (Feb 11, 13) Transport
  - Week 6 (Feb 18, 20) GIS Lab 2: Transport
  - Week 7 (Feb 25, 27) Real Estate
  - Week 8 (Mar 3, 5) GIS Lab 3: Real Est. #1 (PHASE 1 PROPOSAL DUE MAR 5)
  - SPRING BREAK
  - Week 9 (Mar 17, 19) GIS Lab 4: Real Est. #2
  - Week 10 (Mar 24, 26) Marketing
  - Week 11 (Mar 31, Apr 2) GIS Lab 5: Marketing

1. Topic Resequencing Proposal

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Weeks with important content for KFC analysis

- **Revised order of topics (Weeks 4-11)**
  - Week 4 (Feb 4, 6) Geography, Data Science
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  - Week 6 (Feb 18, 20) GIS Lab 5: Marketing
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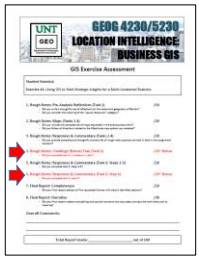
What do you think about this change?

2. Bonus Opportunities in Lab #1

Lab #1 is the one lab in this course where you can achieve a better-than-perfect score

If you do all the regular stuff perfectly and complete the two bonus parts, you can achieve a lab score of **120 out of 100**

Watch for the two bonus sections in the lab documents



GIS Lab Introduction

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GIS Labs

- **Aim of GIS labs:** build your familiarity with specific software packages and a range of GIS applications related to business
- **GIS labs versus the semester project:**
  - ***GIS labs:*** very specific, step by step progress (you are advised on what to do at each point of the analysis), leading to specific results
  - ***GIS project:*** overall goals are specific, but how you get there is not (no step by step guidance in any detailed way)
  - Use the labs to become acquainted with building blocks for your project

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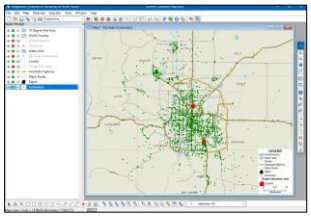
GIS Labs

- We will use three different software packages with GIS capabilities in our five labs
  - **1. Maptitude:** a lesser-known software package in the GIS community broadly, but the preferred choice of members of our national Business Geography community

Maptitude is installed on all of our CSAM lab computers (in both ENV 340 and 336)

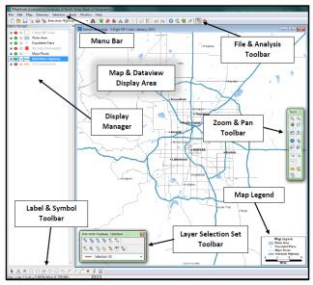


GIS Labs

- We will use three different software packages with GIS capabilities in our five labs

Maptitude's strength is its powerful but easy to learn user interface: much of the same capability of ArcGIS with a much-reduced learning curve

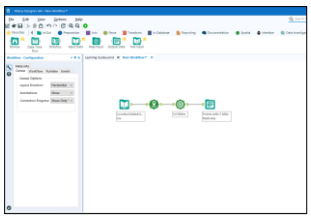
Maptitude is installed on all of our CSAM lab computers (in both ENV 340 and 336)



GIS Labs

- We will use three different software packages with GIS capabilities in our five labs
  - **2. Alteryx:** a data management and analytics software package whose application and capabilities include powerful GIS tools

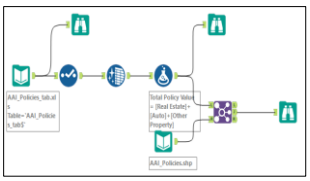
Alteryx is installed on all of our CSAM lab computers (in both ENV 340 and 336)



GIS Labs

- We will use three different software packages with GIS capabilities in our five labs

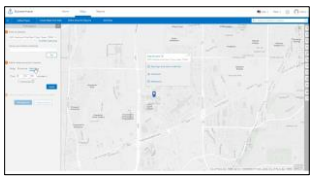
Alteryx's strengths are
(1) its graphical workflow interface, and
(2) that GIS is only a portion of what it can do to manage and analyze large and complex datasets



GIS Labs

- We will use three different software packages with GIS capabilities in our five labs
  - **3. Business Analyst Web:** a cloud-based GIS with a few powerful geo-analytical tools

BA Web is cloud software that you will be able to access from any location with internet access (not just in this lab room)



GIS Labs

- We will use three different software packages with GIS capabilities in our five labs

BA Web's strengths are
(1) the comprehensive datasets it comes bundled with
(2) Its simple feature set (both good and bad)

Please expect an email from Esri soon asking you to **complete the registration process** to enable your cloud access to BA Web

GIS Labs

GIS Lab Number	Software Used	Exercise Focus
1	Maptitude	General Maptitude Literacy (Restaurant Location Assessment)
2	Maptitude	Distribution Network Planning (Non-Store Retailer)
3	Maptitude	Location-Allocation Modeling (Real Estate Store Site Analysis and Selection)
4	Alteryx	GIS Tool Building in Alteryx (Insurance Claims Weather Event Impact Analysis)
5	Business Analyst Web	Data-Driven Market Analysis and Targeting (Marketing Plan Support and Planning)

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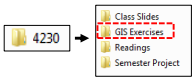
Key GIS Lab Resources

- You will find all of the resources needed to complete your GIS Exercises inside your 4230 folder (in the CSAM computer desktop "class" drive)



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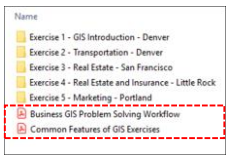
Key GIS Lab Resources

- You will find all of the resources needed to complete your GIS Exercises inside your 4230 folder (in the CSAM computer desktop "class" drive)
  - In the "GIS Exercises" folder: two key background files for all exercises
    - **1. Business GIS Problem Solving Workflow**
    - **2. Common Features of GIS Exercises**



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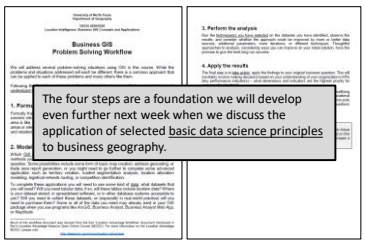
1. Business GIS Problem Solving Workflow

Four-step overall approach for all five GIS labs:

1. Formulate the question
2. Model the solution
3. Perform the analysis
4. Apply the results



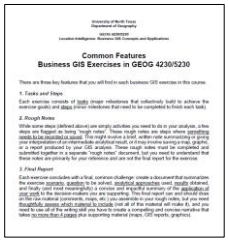
The four steps are a foundation we will develop even further next week when we discuss the application of selected basic data science principles to business geography.

2. Common Features of GIS Labs

Three key features of all labs:

1. Tasks and Steps
2. Rough Notes
3. Final Report

Please ensure you understand what I mean by these three key lab terms



Key GIS Lab Resources

- In the main exercise folder you will also find five GIS exercise sub-folders

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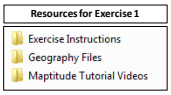
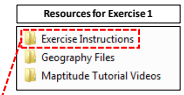
Key GIS Lab Resources

- In the main exercise folder you will also find five GIS exercise sub-folders
  - In each exercise sub-folder you will find a variety of resources



Key GIS Lab Resources

- In the main exercise folder you will also find five GIS exercise sub-folders
  - In each exercise sub-folder you will find a variety of resources
  - Two key resources are in the "exercise instructions" folder for each exercise
    - **1. Exercise Instructions Document**
    - **2. Exercise Evaluation Document**



1. Lab Instructions Document

This guides you through the three key exercise elements already mentioned:

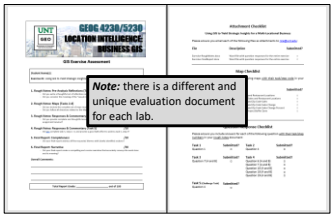
1. Tasks and Steps
2. Rough Notes
3. Final Report

You will find most of these exercises to be lengthy documents, but you should be able to work your way through each one fairly quickly.

2. Lab Evaluation Document

Summarizes the expected products you need to create:

1. Flags the Tasks and Steps where "Rough Notes" written and map responses are necessary
2. Highlights the overall expectations of the lab, showing you how the lab will be graded



Note: there is a different and unique evaluation document for each lab.

2. Lab Evaluation Document

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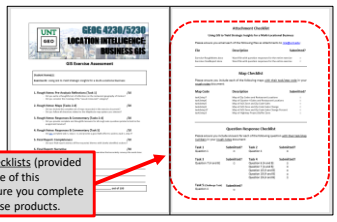

Please use the checklists (provided on the second page of this document) to ensure you complete all expected exercise products.

To Submit Your Lab

- Please submit all of your lab files as email attachments (one email message with all files if possible) :
  - **Professor:** Murray Rice (murray.rice@unt.edu)

Note: due dates for each of the five GIS labs are posted in the schedule section of your syllabus – Exercise 1 is due on Thursday, February 6

Let's Begin With GIS Lab 1

- Please let me know whenever you have issues with any of the exercises

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