GIS Project Rubrics

Whenever the students are doing a project there should be clear expectations of the requirements. Giving the students a rubric beforehand is a great way of making those expectations clear right away. Showing the students an example of the desired level of work is another way to make it clear exactly what is expected.

Of course not every project will be able to use the general rubrics below, but they should serve as a good base on how to actually grade student's GIS projects. There are a number of different options for types of rubrics, and you should use the one that best matches the style of project you are actually having the students do.

- *Rubric Style 1: Basic Map Construction with Questions*
- *Rubric Style 2: Basic Map Construction*
- *Rubric Style 3: Complex Map Construction with Questions*
- *Rubric Style 4: Complex Map Construction*
- *Rubric Style 5: Story App with Embedded Map*

Rubric Style 1: Basic Map Construction with Questions			
Score (Level Achieved)	**Map Construction**	**Questions**	**Productivity**
0 (Not Shown)	No evidence of attempt to complete map	Less than 25% of questions attempted, or completed correctly.	Project not completed
1 (Attempted)	Map construction is attempted, but is missing data layers, or is unreadable	Most questions attempted, but more than half are incomplete or incorrect	Project attempted, but far from complete before given deadline.
2 (Basic)	All of the elements of the map are present, but have not been refined making data difficult to read.	More than half of questions are completed and correct, but lack depth of understanding and analysis	Project not completed by the required deadline. Worktime not well utilized resulting in needing extra time
3 (Acceptable)	Evidence in effort to display data. All data sets are clear and understandable. Still some small errors, such as layer order, transparency, or symbology.	All questions completed and most questions answered correctly. Only a few questions lack full analysis.	Project mostly completed, with some errors present requiring resubmission. Work time well utilized.
4 (Advanced)	Map contains all data in clean, easy to read format. Clear attention to details of making a professional map.	All questions are completed correctly and show clear comprehension of concepts	Project fully completed on, or before, given timeframe. Worktime well utilized with clear regards to deadline.

Scoring:

Point Based: _____/12
Advanced (10-12)
Acceptable (7-9)
Basic (8-11)
Attempted (1-7)
Not Shown (0)

Leveled: _____/4
4: Advanced (All 4s in all categories)
3: Acceptable (No score lower than a 3 in any category)
2: Basic (No score lower than a 2 in any category)
1: Attempted (At least one 1 in any category)
0: Not Shown (A score of 0 in all categories)

Rubric Style 2: Basic Map Construction		
Score (Level Achieved)	**Map Construction**	**Productivity**
0 (Not Shown)	No evidence of attempt to complete map	Project not completed
1 (Attempted)	Map construction is attempted, but is missing data layers, or is unreadable	Project attempted, but far from complete before given deadline.
2 (Basic)	All of the elements of the map are present, but have not been refined making data difficult to read.	Project not completed by the required deadline. Worktime not well utilized resulting in needing extra time
3 (Acceptable)	Evidence in effort to display data. All data sets are clear and understandable. Still some small errors, such as layer order, transparency, or symbology.	Project mostly completed, with some errors present requiring resubmission. Work time well utilized.
4 (Advanced)	Map contains all data in clean, easy to read format. Clear attention to details of making a professional map.	Project fully completed on, or before, given timeframe. Worktime well utilized with clear regards to deadline.

Scoring:

Point Based: _____/8

Advanced (8)

Acceptable (7)

Basic (6)

Attempted (1-5)

Not Shown (0)

Leveled: _____/4

4: Advanced (All 4s in all categories)

3: Acceptable (No score lower than a 3 in any category)

2: Basic (No score lower than a 2 in any category)

1: Attempted (At least one 1 in any category)

0: Not Shown (A score of 0 in all categories)

Rubric Style 3: Complex Map Construction with Questions					
Score (Level Achieved)	**General Design**	**Map Construction**	**Pop-Ups**	**Questions**	**Productivity**
0 (Not Shown)	No attempt to put data together is easily readable format	No evidence of attempt to complete map	Pop-Ups not changed or data not present.	Less than 25% of questions attempted, or completed correctly.	Project not completed
1 (Attempted)	All data present, but symbology makes map contents difficult to read and understand all layers.	Map construction is attempted, but is missing data layers, or is unreadable	Pop-Ups are confusing and unreadable. Some Elements are present, but errors prevent comprehension of pop-up data.	Most questions attempted, but more than half are incomplete or incorrect	Project attempted, but far from complete before given deadline.
2 (Basic)	All data is readable and organized in such a way that all users can understand what the map is showing and how. Some confusion from choice of symbology or style.	All of the elements of the map are present, but have not been refined making data difficult to read.	Pop-ups allow basic compression of data, but errors (ex. improper labeling, excess attributes, make pop-ups difficult to understand	More than half of questions are completed and correct, but lack depth of understanding and analysis	Project not completed by the required deadline. Worktime not well utilized resulting in needing extra time
3 (Acceptable)	Some small errors resulting in only minimal confusion in map compressibility. Map lacking some refinements in things such as the naming of layers, pop-ups, symbology, or layer order.	Evidence in effort to display data. All data sets are clear and understandable. Still some small errors, such as layer order, transparency, or symbology.	Pop-ups contain only a few errors, but none of them make data difficult to understand. There are still some small errors (ex. unnecessary underscores or dashes).	All questions completed and most questions answered correctly. Only a few questions lack full analysis.	Project mostly completed, with some errors present requiring resubmission. Work time well utilized.
4 (Advanced)	Symbology and other refinements (such as map style) make data easily, and quickly understandable to all readers.	Map contains all data in clean, easy to read format. Clear attention to details of making a professional map.	Pop-up information is clear and easily readable. Information is well organized, professional looking, and free of errors.	All questions are completed correctly and show clear comprehension of concepts	Project fully completed on, or before, given timeframe. Worktime well utilized with clear regards to deadline.

Scoring:

Point Based: _____/20

Advanced (16-20)

Acceptable (12-15)

Basic (8-11)

Attempted (1-7)

Not Shown (0)

Leveled: _____/4

4: Advanced (All 4s in all categories)

3: Acceptable (No score lower than a 3 in any category)

2: Basic (No score lower than a 2 in any category)

1: Attempted (At least one 1 in any category)

0: Not Shown (A score of 0 in all categories)

GIS Project Rubrics

Score (Level Achieved)	General Design	Map Construction	Pop-Ups	Productivity
0 (Not Shown)	No attempt to put data together is easily readable format	No evidence of attempt to complete map	Pop-Ups not changed or data not present.	Project not completed
1 (Attempted)	All data present, but symbology makes map contents difficult to read and understand all layers.	Map construction is attempted, but is missing data layers, or is unreadable	Pop-Ups are confusing and unreadable. Some Elements are present, but errors prevent comprehension of pop-up data.	Project attempted, but far from complete before given deadline.
2 (Basic)	All data is readable and organized in such a way that all users can understand what the map is showing and how. Some confusion from choice of symbology or style.	All of the elements of the map are present, but have not been refined making data difficult to read.	Pop-ups allow basic compression of data, but errors (ex. improper labeling, excess attributes, make pop-ups difficult to understand	Project not completed by the required deadline. Worktime not well utilized resulting in needing extra time
3-4 (Acceptable)	Some small errors resulting in only minimal confusion in map compressibility. Map lacking some refinements in things such as the naming of layers, pop-ups, symbology, or layer order.	Evidence in effort to display data. All data sets are clear and understandable. Still some small errors, such as layer order, transparency, or symbology.	Pop-ups contain only a few errors, but none of them make data difficult to understand. There are still some small errors (ex. unnecessary underscores or dashes).	Project mostly completed, with some errors present requiring resubmission. Work time well utilized.
5 (Advanced)	Symbology and other refinements (such as map style) make data easily, and quickly understandable to all readers.	Map contains all data in clean, easy to read format. Clear attention to details of making a professional map.	Pop-up information is clear and easily readable. Information is well organized, professional looking, and free of errors.	Project fully completed on, or before, given timeframe. Worktime well utilized with clear regards to deadline.

Scoring:

Point Based: _____/20
Advanced (16-20)
Acceptable (12-15)
Basic (8-11)
Attempted (1-7)
Not Shown (0)

Leveled: _____/4
4: Advanced (All 5s in all categories)
3: Acceptable (No score lower than a 3 in any category)
2: Basic (No score lower than a 2 in any category)
1: Attempted (At least one 1 in any category)
0: Not Shown (A score of 0 in all categories)

GIS Project Rubrics

Rubric Style 5: Story App with Embedded Map

Score (Level Achieved)	Visuals	Information	Embedded Map	General Design	Questions	Productivity
0 (Not Shown)	No additional visuals added to expedition	No informative text added to expedition	No evidence of attempt to complete map	No attempt to make a story app about the topic	Less than 25% of questions attempted, or completed correctly.	Project not completed
1 (Attempted)	Some visuals added, but less than the required number or some visuals do not connect to the objective	Some informative text added to expedition, but more needed to properly address objectives	Map construction is attempted, but is missing data layers, or is unreadable	Story App started, but missing large amounts of information. Lack of organization makes story app confusing	Most questions attempted, but more than half are incomplete or incorrect	Project attempted, but far from complete before given deadline.
2 (Basic)	Required number of visuals added, but some do not connect to the ideas of the expedition or lack captions	All questions answered, but some answered more completely than others. Some answers lack clarity or depth	All of the elements of the map are present, but have not been refined making data difficult to read.	Most story app elements present, but organizational or design errors make story app goals hard to understand	More than half of questions are completed and correct, but lack depth of understanding and analysis	Project not completed by the required deadline. Worktime not well utilized resulting in needing extra time
3 (Acceptable)	Proper amount and use of visuals, but some small errors in captions or explanations	Informative text is clear and helpful in understanding objective. Sources cited where necessary. Some errors in grammar or missing information	Evidence in effort to display data. All data sets are clear and understandable. Still some small errors, such as layer order, transparency, pop-ups, or symbology.	Story App contains all of the necessary elements, but edits needed in content, visuals, explanations, or organization	All questions completed and most questions answered correctly. Only a few questions lack full analysis.	Project mostly completed, with some errors present requiring resubmission. Work time well utilized.
4 (Advanced)	All visuals added with clear understanding of how they connect to objective without errors	All objectives clearly and professionally met by thorough informative text	Map contains all data in clean, easy to read format. Clear attention to details of making a professional map.	Story App is well done and professional. All elements are present and well organized.	All questions are completed correctly and show clear comprehension of concepts	Project fully completed on, or before, given timeframe. Worktime well utilized with clear regards to deadline.

Scoring:

Point Based: _____/24
Advanced (19-24)
Acceptable (13-18)
Basic (7-12)
Attempted (1-6)
Not Shown (0)

Leveled: _____/4
4: Advanced (All 4s in all categories)
3: Acceptable (No score lower than a 3 in any category)
2: Basic (No score lower than a 2 in any category)
1: Attempted (At least one 1 in any category)
0: Not Shown (A score of 0 in all categories)