Geology 613: EARTH SCIENCES IN THE NYC URBAN ENVIRONMENT

Building Stone of Lower Manhattan Field Guide

Value: 20%

Initial Layout and Description Due Date: 11:59 PM xxxxxxx

Final Report Due Date: 6:20 PM xxxxxxx

In this field trip-based exercise you will work in a group to create a field trip guide of building stones preserved in historic structures of Lower Manhattan. The goal of this assignment is to create a document that would allow you, or a colleague, to retrace your steps and learn about the geological and historical aspects of buildings stones in Lower Manhattan.

For this report you will have to include the following:

- Provide a street map of your walking route with the locations of all key buildings (those which you describe) marked and labeled to correspond with descriptions
- A thorough description of buildings that span approximately 200 years of New York history, and the stones from which they are made. Descriptions for each building must include:
    1) A headline which includes the name and address of the building, the date of construction, and names of buildings stones used
    2) Written descriptions of buildings stone (color, grain size, fabrics, fossils, identifiable minerals), where each material is located on the building, and the state of preservation/deterioration of each rock. Include the name of the building stone if it is known.
    3) Photos illustrating representative images of the stone and its key features, with figure titles and numbers, and reference to the figure numbers in the text.
    4) Historic facts about the building with references cited
- The report must include a summary in which you note historical and geographic trends in the materials used to build within New York City, and an explanation to account for these trends.

To help guide you to producing complete descriptions and a guidebook layout that is effective and user-friendly, each group will prepare a write-up for the main building at St. Paul's Chapel, including photographs, rock descriptions, historic information, and references (as described above). Each group will make copies for their classmates. In addition, each group will create a Powerpoint file that includes descriptions of each rock type, and the photographs that display key features, and to which the description text refer. The instructor will use the Powerpoint file to lead a discussion of each group's work, and classmates will provide constructive criticism of their peers' descriptions and guide layout. Files must be emailed to instructor by 11:59PM the day before the presentation.

The grade will be assigned as a group, and it is assumed that group members will work as a team and contribute equally to the product. To monitor the validity of this assumption, all students must submit their field note books for examination. Furthermore, all students will email the instructor a confidential assessment of the relative contributions of group members. If either line of evidence indicates an inequitable division of effort then grades may be redistributed at the discretion of the instructor.

Learning Objectives

Students will be able to:

- Describe the geological materials exposed in New York's buildings
- Correlate rock types, rock properties, and preservation/deterioration aspects of rocks
- Describe how the use of building materials changed over time due to available resources and financial considerations
- Design a guidebook that will allow others to follow a self-guided tour route
- Construct a Word document in which photos are embedded and annotated
- Cite resources accurately and completely
- Work cooperatively in a team

Grading Rubric for the Building Stone Guide

Aspect of the Report	**Grade Point**				%	Score
	4	3	2	0		
Completeness, accuracy, and effectiveness of initial description and layout of guide to St. Paul's Chapel. Copies must be supplied to classmates, and descriptions and photos must be embedded in a Powerpoint file.					20	
Completeness and accuracy of location and route map, including the location of all buildings described in the report. Source of map must be cited.					10	
Completeness and accuracy of rock descriptions					30	
Quality of supporting illustrations and photos, and their appropriate integration into the text. Citations are provided for all non-original images. (Lack of citations will result in a 0.)					20	
Quality of summary in which the building stone descriptions are integrated into NYC history. All research references are cited. (Lack of citations will result in a 0.)					10	
Quality of writing					10	
					TOTAL out of 4 =	