I. GENERAL PURPOSE/AUDIENCE

Geology is a multi-disciplinary science, which incorporates the aspects of chemistry, mathematics, and physics important to understanding the Earth and its history. Because Geology is multidisciplinary, geologists may do a variety of tasks: search for minerals, fuels, and natural materials that society needs; develop plans for environmental protection and restoration; evaluate infrastructure for stability; work with engineers on waste disposal sites or in road and dam construction; and work to minimize the effects of floods, volcanoes, or earthquakes. Geologists study the movements of continents and the evolution of the biosphere as well.

Audiences may include individual landowners, elected officials, CEOs of Fortune 500 companies, fellow geologists, researchers in other fields, and the general public.

II. TYPES OF WRITING

Students

- Literature reviews
- Term papers
- Lab reports

Professional

- Geotechnical reports (consulting and industry)
- Presentations at regional, national, international, and professional meetings and conferences
- Peer-reviewed research papers tend to follow the following format:
    - Introduction (where/ when/ how/ why/ previous work done on the subject)
    - Identification of a problem and presentation of hypotheses
    - Methods used to address the issue
    - Data collected
    - Interpretations and discussion
    - Acknowledgments, References, Appendices

Other

- Grant proposals
- Educational materials (K-12, professional and public)
- Media (press) releases

III. TYPES OF EVIDENCE

- Qualitative data
- Quantitative research: measurements, facts, statistics, lab work
- Primary research: laboratory observations, field research
- Secondary research: books, journal articles (peer reviewed)
- Deduction and inference based on data collected
- Graphs, charts, tables, and other visuals

IV. WRITING CONVENTIONS

- Primary sources (interviews, observations, surveys)
- Secondary sources (books, newspapers, magazines, biographies, journal articles)
- Charts, graphs, maps, videos, brochures
- Quantitative data (facts, statistics, numbers)
- Research presentations

V. COMMON TERMS AND CONCEPTS

- Atmosphere
- Asthenosphere
- Carbon Dating
- Coastal Dynamics
- Convergent Boundary
- Core
- Divergent Boundary
- Fluvial Processes
- Igneous Rock
- Lithification
- Lithosphere
- Mantle
- Metamorphic Rock
- Plate Tectonics
- Sedimentary Rock
- The Rock Cycle
- Transform Boundary

VI. CITATION STYLE

- **GSA (Geological Society of America)**
- Find an example here: http://www.geosociety.org/pubs/documents/GSA_RefGuide_Examples_000.pdf
- In-text citations should include the author's last name and date of publication: (Smith and Jones, 2015).