

ESG 300 Writing in Engineering Science (Required)

Course Catalog description:

See Requirements for the Major in Engineering Science, Upper-Division Writing Requirement.

S/U grading, 0 credit

Pre- or Corequisite(s): WRT 102; ESG major; U2 standing, ESG 312

Text(s) or other required material:

Sorby and Bulleit, ISBN#0130482420, An Engineer's Guide to Technical Communication

Course learning outcomes:

- Effectively write documents and reports to express engineering and scientific results.
- Effectively create graph/plot data to express the same.
- Effectively create tables of data to express the same.
- Effectively deliver oral presentations to express the same.
- Evaluate the above work of other engineers to improve the above expression.

Topics Covered:

- Writing guidelines and stylistic elements for technical manuscripts.
- The most common errors in the above documents.
- Acceptable formats for figures and tables in refereed journals and similar publications.
- The most common errors in the above.
- The style, format, and content of engineering oral-presentations to achieve clear, complete, correct, concise, and compelling communication of results.
- Mechanism of critique and feedback for documents and oral presentations.

Class/ Laboratory Schedule, i.e. number of sessions each week and duration of each session:

This course meets weekly in conjunction with the laboratory, named ESG312.

Contribution of Course to meet requirement of Criterion 5:

This course attacks the "ability to communicate effectively" objective. The students are treated as employees in an engineering firm. As such, they are informed that first-time employees are often criticized for their poor "communication skills". Hence, as employees they must deliver their results and message to their employer and fellow employees in an appropriate manner.

Relationship of course to program outcomes:

Oral and written communication is the key to safety and success.

Person(s) who prepared this description and date of preparation:

Jim Quinn 01/08/2009