**Stony Brook University**

**Department of Electrical and Computer Engineering**

**Stony Brook, New York, 11794-2350**

**ESE 440/441 Report Format and Grading System**

**Fall 2016/Spring 2017**

ESE 440/441 Report should consider the following items.

* Title Page
* Abstract
* Table of Content
* Section 1. Goals and Impacts:

Discuss the project goals and their impact on society and environment, e.g., describe the need of such a project (via market analysis) and how its goal can help society and environment.

* Section 2. Background

2.1 Survey

- A survey of work by previous investigators and/or designers

2.2 Project Planning

- analyze the knowledge and skills needed at the beginning of projects and develop strategies for acquiring the missing knowledge and skills.

* Section 3. System Design (ESE 440)

3.1 Design Constraints

* + discuss the various design constraints (technical, financial, ethical, social, environmental) and standards (various IEEE standards, government regulations)

3.2 Design Considered

* + discussion the various designs considered

3.3 Final Design

* + provide a detailed description of the final design, show diagrams, photos, etc. Diagrams should be drawn with instruments or computer graphics and neatly labeled. All diagrams and photos should have a figure number and caption. Show an equipment list with name, manufacturer and serial number (if applicable) of laboratory equipment, computer, software packages.
  + Discuss how/why the final design was chosen, e.g., to meet various design constraints and standards
  + (For ESE 441) discuss any implementation problem and how/why the final implementation differs from the initial design of ESE 440.
* Section 3: System Implementation and Testing (ESE 441)

3.1 Implementation Problems

- discussion on implementation problems 10 points

3.2 Final Implementation (30 points)

- describe the final implementation and how/why the

final implementation differs from the initial design of ESE 440. 20 points

- discuss how the final implementation meets the design specifications, various constraints and standards. 10 points

3.3 Testing

- describe what tests and what criteria was used to measure the success of the project 10 points

* Section 4: Results and Discussions
  1. : Result Analysis (ESE 441)
  + discussion of results, how well they relate to the objective of the design, discussion of error (percentage of error, cause, etc).

4.2/4.1 Multi-Disciplinary Issue

- discuss the team’s multi-disciplinary experience if applicable, e.g., a team of combinations of CE/EE students should discuss how they work together and share their expertise and background.

- discuss how the project can be applied or has an influence in a non EE/CE area.

4.3/4.2 Professional/Ethical Issues

- discuss professional or ethical issues and consideration of the project.

4.4/4.3 Impact of Project on Society or Contemporary Issues

- discuss possible impact the project on society and other contemporary issues.

* Section 5. Summary and Conclusion
  + Provide a summary and conclusion of the project.
* Acknowledgements
* References

**Grading System for ESE 440 Report**

1. Goal and Impact: 5 points
2. Background

2.1 Survey 10 points

2.2 Project Planning 10 points

1. System Design

3.1 Design Constraints 10 points

3.2 Design Considered 10 points

3.3 Final Design 30 points

1. Discussion
   1. Mutli-Disciplinary Experience/Issues 5 points
   2. Professional / Ethical Considerations 5 points
   3. Impact of Project on Society/Environment 5 points
2. Conclusion and Overall Project Written Communications 10 points

Total: 100 points

**Grading System for ESE 441 Report**

1. Goal and Impact:
2. Background
3. System Implementation and Testing

3.1 Implementation problems 10 points

3.2 Final Implementation

- describe the final implementation and how/why the

final implementation differs from the initial design of ESE 440. 20 points

- discuss how the final implementation meets the design specifications

various constraints and standards. 10 points

3.3 Testing 10 points

1. Discussion

4.1 Result Analysis 10 points

4.2 Mutli-Disciplinary Team Experience 5 points

4.3 Professional / Ethical Considerations 5 points

4.4 Impact of Project on Society/Environment 5 points

1. Summary Overall Project Written Communications 10 points
2. Overall Project Oral Communications 5 points
3. Poster 10 points

Total: 100 points

## References

The following illustrates how to reference

* an article found in a journal;
* an article found in a book with a collection of papers;
* an article found in a conference proceedings; and
* a book.

This statement can be verified by an article in a journal[1]. This statement can be verified by an article in a book with a collection of papers[2]. This statement can be verified by an article in a conference proceedings[3]. This statement can be verified by a book[4].

**References**

[1] Name of Author(s), ``Title of Article'', Name of Journal, vol. 3, pp. 4--22, April 2010.

[2] Name of Author(s),  ``Title of Article". In Name of the Book with a collection of papers, pp. 65--89, edited by name of editor(s), Name of Publisher, Address of Publisher, Year.

[3] Name of Author(s),  ``Title of Article".  In the Proceedings of Name of the Conference , pp. 65--89, Conference Address, Conference Date and Year.

[4] Name of Author,  Name of the Book, Name of Publisher, Address of Publisher, Year.