

The University of Texas at El Paso
Individual studies
Summer 2019 – Course Syllabus

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Background and Context:

A 3-credit individual studies class, is alternative for advanced students who want to develop research in the field of systems engineering or apply concepts in real-world settings. Students must discuss potential project ideas with the course instructor to identify a general area of interest, the student along either the instructor should discuss the specific project ideas on the basis of a proposed project abstract.

Project Intent and Objectives:

The intent of the project course is for the candidates to apply SE concepts, practices, and principles that they have been introduced to in their program of study:

1. To a “real” problem within an application domain of interest to the student
2. To an investigative study of some aspect of systems engineering (e.g., the utility and relevance of an ontology to project success); or
3. To the development of a systems engineering application case study

The objective of this project course is to “stretch” the thinking of the candidate and to provide an experience in applying the theoretical concepts within a pragmatic setting. The student may only apply a subset of the coursework in the execution of the project work, but will have to conduct some independent research to be successful in this endeavor. The specific approach to completing the requirements of the project will depend upon the nature of the project selected by the candidate (application, SE research, or case study) and the faculty advisor

Project Deliverable and Level of Effort:

Independent of the project focus and emphasis, we expect the output of this effort to be in the form of a technical report, using the following format: (written in word, 1.5 spacing, Times New Roman 11, ~15 pages)

Possible outline for project reports

Prepare your final report for an interdisciplinary group of decision makers. Your written reports must be formatted into different section headings (shown below)

1. **Introductory Pages**

- Cover Page: title, authors
- Table of Contents, List of Tables, and List of Figures

2. **Executive Summary** (250 words, brief summary of the overall project)

3. **Introduction**

- Mention the importance of the problem/area being studied
- Ideally provide specific information from reports related to the problem and its significance (Cite at least 10 references)
- Explain benefits of solving the problem, including motivation economics
- Present a clear and concise definition of the problem

4. **Literature Review**

- Present an up-to date literature review
- End the literature review section mentioning a specific idea about how you may expand the work presented by them

5. **Model Development**

- Mention the tools which will be for the analysis of the problem indicated in the previous section

6. **Problem description**

- Clearly state the problem and project objectives

7. **Conclusions and Future Work**

- Write a paragraph mentioning the final conclusions for the proposed work
- Mention final recommendations and Future work

8. **References**

Students with disabilities:

If you have or suspect a disability and need accommodations you should contact Disabled Student Services Office (DSSO) at 747-5148 or at dss@utep.edu or come by Room 106 Union East Building.

Academic Honesty

It is expected that the students will conduct with integrity in all course areas. Do not attempt to engage in a dishonest activity such as copying, plagiarism, falsifying information, etc. The professor will take measures to prevent such instances and will bring a case to the university

authorities. Information about University wide policies could be found in the Dean of Students Web page at <http://studentaffairs.utep.edu/Default.aspx?alias=studentaffairs.utep.edu/dos>