IME 601 - PROJECT MANAGEMENT MODULE

Basic Notes

Class Preparation and Reading Review
This should be Completed Prior to Class

Key Concepts to be Discussed in Class:

Questions about Subject Matter:

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Basic Notes

Project Management Outline

- Project Scope
  - Given in Assignment

- Work Break Down Structure
  - What Has to Be Done?
  - Why?
  - In What Order?

- Project Timeline
  - Based on WBS
  - What will You Do When?
  - How will you Modify if Needed?

Example IME 100 Design Project

- The "trophy" will incorporate as many of the following as possible:
  - hardness test,
  - tensile test,
  - sheet metal,
  - casting,
  - machining,
  - electronic circuit from ECE lab,
  - joining (welding, brazing, and soldering),
  - polymer processing,
  - powder processing,
  - additive manufacturing,
  - and assembly.
  - Further it would have to lend itself to the ME Design Sequence - Reverse Engineering, Bill of Materials etc.

- There are two options:
  - Keeping the practica sequence as is; but changing the parts to be made.

  - Changing both the practica sequence and changing the parts to be made.

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Project Scope

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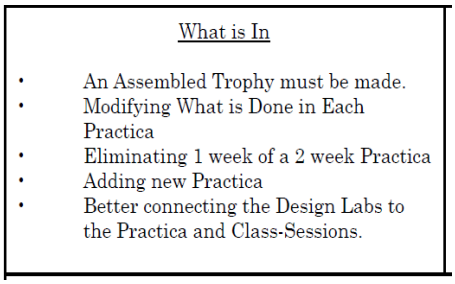

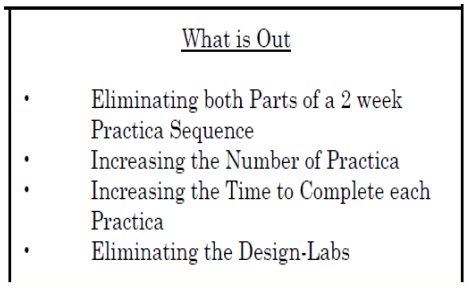

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Project Scope Development

What is In

- An Assembled Trophy must be made.
- Modifying What is Done in Each Practica
- Eliminating 1 week of a 2 week Practica
- Adding new Practica
- Better connecting the Design Labs to the Practica and Class-Sessions.

What is Out

- Eliminating both Parts of a 2 week Practica Sequence
- Increasing the Number of Practica
- Increasing the Time to Complete each Practica
- Eliminating the Design-Labs

Project Scope: Design a Kettering Trophy would be "made" of all (or maximum possible) "parts" made by students in the practica and design studios. It must be possible to make all parts to be created in the practica within 9 2hr sessions (note this could include assembly). The same is true about the Design Labs. The following will be considered when designing the Kettering Trophy.

- Adding new Practica
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Basic Notes

Project Scope for IME 601

- Your Project is to Successfully Complete IME 601 - During Spring 2016 Term
  - What is In? Why?
  - What is Out? Why?
- Combine What is In/Why? & What is Out/Why?
- Review and Revise - Make Clear Coherent

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Basic Notes

Work Break Down Structure

- Identify all Steps/Activities Needed to Complete Project According to Scope

Item	Description
1	Each Team Member Submits Initial Concept
2	Team Member Copies and Pastes Appropriate Content into Review Pages
3	Review of Initial Concepts
4	Submitters Revise Concepts based on Reviews if Necessary
5	Someone enters appropriate information into "Compare the Concepts" of "Concept Generation"
6	Team Member Copies and Pastes Appropriate Content into First Round Ballot.
7	Team Members vote to Identify Best Two Initial Concepts

Item	Description
8	Initial NABC Statements Submitted
9	Review of Initial NABC Statements Completed
10	Draft NABC Statements Submitted
11	Review of Draft NABC Statements Completed
12	Draft Value Proposition Submitted
13	Review of Draft Value Proposition Completed
14	Final Value Proposition Completed
15	Final Design Completed
16	Improvement and Optimization Completed

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17	Improvement and Optimization Recorded (Copy/Paste)
18	Prototype Reviews for Improvement and Optimization Completed
19	Reason for Rejecting First Concept Recorded
20	Reasons for Accepting Two Concepts to Move Forward Recorded.
21	Prototype Completed
22	Best Initial Concept Determined
23	Initial Proposal Prepared

Item	Description
24	Possible Critical Challenges Named
25	Critical Challenges Identified
26	Solutions to Critical Challenges Accepted
27	Notes for Development of Prototype Recorded
28	Two Concepts to Be Further Considered (with possible revisions) Submitted
29	Appropriate Copying and Pasting of Two Concepts to Be Further Considered
30	Voting for Best Initial Concept Completed
31	Project Submitted to Professor

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Basic Notes

Work Break Down Structure Review Step1

- After Brainstorming
  - Are All Tasks Relevant?
  - Are There any Missing Tasks?
- Justification is Required

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Work Break Down Structure Review Step 2

- Possible Combination of Tasks

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Work Breakdown Structure

- To Support Project Scope to Successfully Complete IME 601 - During Spring 2016 Term
- Initial List
  - Brainstorming - Good Project Scope Makes Easy

- Ensuring Relevance
  - Good Project Scope Makes Y/N Easy

- Possible Task Combination
  - If the Above is Easy, this Should be Easier

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Basic Notes

Developing Draft Schedule

- Identify Last Key Activity and Due Date
  - Identify Activities Required
  - Determine time Required

	A	B	C	D
1	Item	Description	Date	Key Items
2	31	Project Submitted to Professor	12/11/15 11:59:59PM	
15	13	Review of Draft Value Proposition Completed		
16	14	Final Value Proposition Completed	12/11/15 10:59:59PM	x

Keep Going

1	Item	Description	Date	Key Items
2	31	Project Submitted to Professor	12/11/15 11:59:59PM	
3	14	Final Value Proposition Completed	12/11/15 10:59:59PM	
16	13	Review of Draft Value Proposition Completed	12/11/15 8:59:59PM	x

Keep Going

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2	31	Project Submitted to Professor	12/11/15 11:59:59PM	
3	14	Final Value Proposition Completed	12/11/15 10:59:59PM	
4	13	Review of Draft Value Proposition Completed	12/11/15 8:59:59PM	
16	12	Draft Value Proposition Submitted	12/11/15 4:59:59PM	x

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Basic Notes

Proposal Demonstrating Good Project Management Practices

- To Support Project Scope to Successfully Complete IME 601 - During Spring 2016 Term
- Project Scope

- Work Breakdown Structure

- Schedule