ME 2101-3 LAB FIRST DAY MATERIALS

Laboratory Section Learning Objectives

1) **Engineering Problem Solving (Move from Knowledge to Application Level of Learning)**
   - Formulating the Problem
   - Solving the Problem
   - Implementing the Solution
   - Documenting the Process
   - Quality Principles
2) **Working in Teams (Move from unaware to Comprehension Level of Learning)**
   - Team Dynamics
   - Team Communication
   - Social Norms
   - Conflict Management
3) **Written/Oral Communication (Move from unaware to Application Level of Learning)**
   - Organize and Present Technical Work
   - Graphical Representations
4) **Planning for Success (Move from unaware to Knowledge Level of Learning)**
   - Learning to Learn
   - Assessment of Progress
   - Time/Project Management

ME 2101-3 LAB FIRST DAY MATERIALS

Lab Session Expectations

The expectations for the Lab Session of the course are listed below. **Meeting Customer Expectations is a characteristic of Self-Regulated Learners** (one of the main 5 Course Objectives for ME 2101-3). We expect that each student/team will:

1. Complete the assigned readings and activities before class (see the ME 2101-3 Course Calendar).
2. Attend and be on time for the scheduled class meetings.
3. Actively participate in all learning activities and tasks.
4. Treat teammates with respect.
5. Assess others' work fairly and honestly using the checklists supplied by the faculty.
6. Maintain the team attendance by signing the Lab attendance sheet (after teams are formed).
7. Develop a Design Notebook that the team will bring to each class.
8. Submit four Team process checks during the course of the semester.
9. Attend the **Assembly by Willing Workers** class.
10. Attend the course Celebration.
11. **Avoid disruptive behaviors** in class (e.g., side conversations, sleeping, working on homework assignments for other classes, etc.) (see Section 4 of the First Day handout).
12. Meet or Exceed Expectations on the work products (i.e., project work).
13. Improve work that is assessed as Needs Improvement, No Credible Effort, or No Submit.
14. Retain all work for the Lab Session until final grades are posted. If our record of your grades is ever in error, you will need to have your original work to verify your actual grade.

Laboratory Grade

All the assessable work products in the Lab are team generated. The details of how your performance on the various assignments is converted into a letter grade are shown in the table on the next page.

As long as you actively participate in and contribute to the work generated by your team, your individual Laboratory grade will be the same as your team's Lab grade. However, it *is* possible for your individual grade to fall below that of your team. If you consistently miss Lab, you will start accumulating individual Self Regulation Lapses after your second missed class (see item 6d in the following table). Also, if you consistently fail to be a productive member of your team and receive two or more Team Dynamics Warnings you will accrue individual Self Regulation Lapses (see items 6e in the following table). Finally, as is the case in the other ME 2101-3 sessions, disruptive classroom behavior will cause you to receive a Self regulation Laps (see item 6f in the table)

ME 2101-3 LAB FIRST DAY MATERIALS

Laboratory Session Grade Specifications

Quality of Work	Defects	Laboratory Grade
Total Number of Exceeds *	Total Number of Defects	
3 or **more**	0	**A**
fewer than 3	0	**B**
---	1	**C**
---	2	**D**
---	**3 or 4**	**F**
5 or more defects results in course grade of FAIL		

The 'Defects' are defined below; the impact of the 'defects' on your semester grade represents your Customer's sense of the relative importance of your demonstrating the characteristics of a Self-Regulated Learner. The 'defects' are **cumulative**.

Cognitive Problems	**Number of 'Defects'**
1. **one** (final assessment of) No Submittal or No Credible Effort	**2**
2. **two (2) or more** (final assessments of) No Submittal or No Credible Effort	**3**
3. **one** (**1**) **OR two** (**2**) (final assessments of) Needs Improvement	**1**
4. **three** (**3**) **OR four** (**4**) (final assessments of) Needs Improvement	**2**
5. **five** (**5**) **OR more** (final assessments of) Needs Improvement	**3**
Affective Behavior Problems (self regulation issues)	
6. **four** (**4**) **OR five** (**5**) Self Regulation Lapses **Team Generated** a) team absences (Each absence is a SR-Laps.) b) failure to submit team process checks (Each failure is a SR-Laps.) c) resubmitting work a second time to remove an remove an NI or NCE **Individual Generated** d) class absences (Each absence is a SR-Laps.) e) team dynamics warning (Each instance after the first is a SR-Laps.) f) instances of disruptive, unethical, uncooperative, or destructive classroom behavior (Each instance is a SR-Laps.)†	**1**
7. **six** (**6**) Self Regulation Lapses (See Item 6 for Details.)	**2**
8. **seven** (**7**) **or more** Self Regulation Lapses (See Item 6 for Details.)	**3**
9. **Team** misses 'Assembly by Willing Workers' –if applied- Class.	**1**
10. **Team** misses Celebration.	**1**

* All peer-awarded grades of Exceeds are subject to instructor approval.

†Self Regulation Lapses include but are not limited to: absences, lateness to class, not participating in class activities, being unprepared for class, disruptive or unethical classroom behaviors, failure to cooperate with in-class instructions, minor inappropriate use of TU facilities and property, and third (or fourth) submission of an assignment. Behavioral expectations are explicitly stated in the white Course First Day materials.

Laboratory Assignments

The assignments for the Laboratory Session are a series of documents that are located in the handouts distributed to you. The following assignments (sorted in alphabetical order) are available.

1. L1_ Teammate Interview
2. L2_ Preparing Design Notebook
3. L3_ The Process Design Project #1 (used for assignments L3a, b, c, d, and e)
4. L4_ Team Process Checks (used for team process checks)
5. L5_ Setting Team Norms
6. L6_Team_Exam or celebration (information about the end of term celebration)

Refer to the attached summary calendar of Lab Assignments, as well as the Course Calendar, for due dates and resubmission dates).

All of your work for Lab will be kept in a Team Design Notebook that will be collected by the instructors at various times during the semester. More information about the Design notebook is in L2_ Preparing Design Notebook.

ME 2101-3 LAB FIRST DAY MATERIALS

Table 1 - Lab Assignments Schedule by Session

Assignment	Session Due	Session Returned	Re-Submission
L-1 – Teammate Interview	L_03_1		
L-2 – Team's Design Notebook	L_03_2	L_04_1	
L-5 – Setting Team Norms (step 1)	L_03_1		
L-3 – Read Project 1	L_03_2		
L-2 – Design Notebook (1/2 at random)	L_04_1	L_04_2	
L-4 – First Team Process Checks	L_04_1	L_05_1	L_06_1
L-5 – Setting Team Norms (Complete)	L_04_1		
L-3a – Artifact Project - Artifact Description	L_04_2		L_05_1
L-2 – Team Design Notebook (remaining 1/2)	L_05_1	L_05_2	
L-3b – Artifact Project – Problem Definition	L_05_1		L_05_2
L-3c – Artifact Project – Idea Generation	L_06_1		L_06_2
L-4 – Second Team Process Checks	L_06_1	L_06_2	
L-3d – Artifact Project – Implementation	L_06_2		
L-3e – Artifact Project – Testing	L_06_2		
L-6 – Team Exam	Celebration		
L-2 – Design Notebook Collection	Celebration		

Assessment of Work Products

One of the skills we want you to develop over the semester is the ability to critically evaluate your own and others' work. In order to do this, you will be peer assessing other teams' work. This is a skill we think is very important to your development as engineers and we ask that you take the peer assessment process seriously. For this to be an effective process, you must learn how to give and to take constructive feedback. Failure to accurately evaluate other teams' work will result in awarding of a Self-Regulation Laps for the team.

There are a number of checklists associated with your work. These checklists can be found in ME 2101-3 -CD distributed to you.

Additional Requirements: Laboratory Section Cheating

Over the course of the semester, you will be viewing Design Notebooks from previous semesters and the work done by your peers. **You are in no way allowed to duplicate other teams' work.** If you do use someone else's ideas (another team or from a Web search), you must acknowledge the source of the ideas. Failure to provide such a reference to others' work will be viewed as cheating and will be handled by the Cheating Policy of the College (see first day materials for the course, white pages).