

COURSE GUIDE TO ME 402
INTERNSHIP IN ENGINEERING DESIGN
MECHANICAL ENGINEERING
CLEMSON UNIVERSITY
SPRING 2010

1/7/2010

MEMO TO: Students in ME 402

FROM: J.D. Summers

SUBJECT: Format of ME 402

Welcome to ME 402: Internship in Engineering Design. This course has been a required part of the mechanical engineering curriculum for over three decades and has addressed problems presented by over a hundred companies and agencies. You should consider this course as both a capstone to the undergraduate academics you are completing and a cornerstone for the engineering career you are likely starting.

As a capstone, this course will give you a chance to apply what you have learned here at Clemson to a real-world problem. It will also afford you the opportunity to seek counsel on your project from any of the mechanical engineering faculty, challenging you to discover and make use of resources.

As a cornerstone, it may represent your first real engineering project. Take advantage of this! Take some risks to maximize your learning. Get input from sources outside of Clemson. Try for more than just a grade and stretch yourself for a real experience.

Your team of typically four students will work independently of the other teams, reporting to an advisor team of faculty members (capstone) and, in some cases, an experienced engineering manager from industry (cornerstone).

Please read this guide and ask questions about anything you do not understand. The time spent reading this guide will be less than the time wasted if you do not.

A handwritten signature in black ink that reads "Joshua D. Summers". The signature is written in a cursive style with a large initial 'J' and 'S'.

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Advisory Committee: **Error! Bookmark not defined.**

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Advisory Committee: **Error! Bookmark not defined.**

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Project Sponsors:..... **Error! Bookmark not defined.**

Advisory Committee: **Error! Bookmark not defined.**

Tube-to-Header Leaks in Aluminum Automotive Radiators**Error! Bookmark not defined.**

Project Abstract: **Error! Bookmark not defined.**

Project Leader: **Error! Bookmark not defined.**

Advisory Committee: **Error! Bookmark not defined.**

ME 402 INTERNSHIP IN ENGINEERING DESIGN INTRODUCTION AND OVERVIEW

1. SUMMARY

Who

- You will be formed into teams nominally consisting of four to five students each, based on brief resumes of your skills and interests. Everyone on the team must be fully cognizant of all activities on the team. Remember that everyone's name will be on each document generated and submitted to the advisory committee and the customer. For that reason, you should review everything to make sure that it is worthy of having your name attached to it.
- Your customers will be the people who represent the company or agency with a design challenge for you. Involve them, but in a way that minimizes the time they need to spend. More than 100 companies have participated in this program and they keep participating because Clemson students have delivered high quality products. Two important axioms should be reconciled by you:
 1. "The customer is always right" and
 2. "The customer does not always know what the customer wants".
- Your advisors will review your *Product, Process, Presentation, and People* skills. They will provide some advice, but almost no specific technical direction. They will assess your performance and evaluate your progress; you will earn your grade. These advisors shall adopt a "high level management" as opposed to a "low level technical" outlook. Thus, the final work product is your own, not that of the advisory committee.

What

- The project upon which you will work will be a real project provided by industry. That is, the ultimate goal is that the customers use your design to their benefit.
- As you progress toward your goal, you will communicate that progress with written reports and presentations made to your advisors, and, at key points, to your customers. Depending on the project, you will likely produce hardware, such as test rigs, prototypes, and an actual final useable product representing your design.

How

- Just as you will be working on a real project, your advisors will treat your work as if it were occurring in an industrial, as opposed to an academic, environment. Most often, the four to six person teams will work independently on the same project. Occasionally, if the project is large and challenging, it will be partitioned into smaller projects and the teams will work cooperatively. This is not a competition between teams. All teams on a project can earn superior grades just as all teams can earn failing grades.
- You will conduct yourself professionally at all times, taking the criticism offered with dignity, respect, and humility. You will treat all others as you would have them treat you. You will demonstrate the high values of Clemson University as you represent yourself, your team, your department, and your university at all times.

- You will have a budget and use of the engineering shops to produce hardware as prototypes. Their time permitting, you may seek expertise from members of faculty within Mechanical Engineering and within the larger Clemson community.

When and Where

- There will be a series of lectures throughout the semester; “Just in Time” lectures developed to support you in your design projects. These lectures are scheduled on Thursday afternoons at 2:00 in Kinard 201. These lectures may include experts in various fields relating to product innovation and will be a valuable resource to you. All students are expected to attend these lectures.
- Design review meetings with your advisory committee are scheduled weekly by the individual teams and are expected to be during the ME 402 Lab scheduled times (Tuesdays or Thursdays from 3:30 to 6:30). ***There is no excuse for missing these meeting times as this is during scheduled class hours.***
- Meetings that are required between the customer and project teams will occur throughout the semester and are the responsibility of the project teams.
- Regular and punctual attendance at all lecture meetings, team/advisor meetings, and design team sessions is the responsibility of the individual student and is especially important in this course because of the team design efforts. Not only does the absentee lose the benefits of attendance, but also their absence adversely affects the accomplishments of others in their team.
- Regular attendance is expected. Those habitually absenting themselves from design meetings will FAIL this course. After review of the circumstances, the advisory committees will decide when and if absences are excessive. It is the responsibility of students to keep their advisory committee informed as to reasons for absence prior to the absence.
- **SPECIAL NOTE:** Many of you will be interviewing for jobs. Others will be making plant visits relative to prospective employment. Bear in mind that you have a *professional responsibility* to members of your team and to your Advisory Committee to maintain a proper level of work. Arrange your interview and trip schedule to minimize conflicts with your work and keep your team and your advisory committee informed of your plans to be away.
- The Design War Room (EIB 253) is available to the ME 402 students for use on the senior design projects. The War Room is equipped with computers that have CAD/CAE/CAM software, project management software, and office applications, lockers for each project team, and a projector to practice presentations. This design lab is supervised by Mr. Chiradeep Sen, who can be reached at csen@clemson.edu. Monitor your e-mail for updates on developments in the War Room. If you have special requests, please contact either Mr. Sen or Dr. Summers. The undergraduate computing lab is also designated as an ME 402 priority lab. This lab has software that is relevant to your work. Questions and concerns about this lab should be directed at Mr. Sen. Finally, the Cook Prototype Shop is available to ME 402 projects. Additional hours may be arranged to keep the shop open in the evenings and weekends by contacting Mr. Sen.

2. COURSE INFORMATION

Catalog Description

ME 402, Internship in Engineering Design. Students are given the opportunity to apply creatively their general knowledge and their knowledge of engineering in the solution of an open-ended design problem involving engineering systems, machines, or devices. The source of the problem is external to the university and the students' progress in its solution is monitored and evaluated by a faculty advisory committee. Preq: **ME 401**, ME 312 (concurrent enrollment allowed) and completion of ALL ME 3XX courses with C's or better.

Objectives

1. To develop in the student an understanding of and the ability to use methods of design in the formulation and analysis of a large open-ended design problem.
2. To develop and practice the ability to present technical reports in both oral and written formats.
3. To develop teaming skills which are practiced across various boundaries.
4. To understand and use economics as a design criterion.

Grading

The students earn the three (3) credits assigned to this course by successfully completing their part of their group's design project. The final grade will be based both on the individual's performance, and on the team performance. Your advisory committee will inform you concerning the details of its grading procedure. Generally, you will be evaluated with respect to design (both process and product), communication (both written and oral), and teamwork. Each project and each team is unique. Therefore, while we seek to provide a consistent approach to evaluation, each situation will be addressed uniquely. Table 1 illustrates the expectations for grades in the course. The grading specifics are specified by each advisory committee.

Table 1: Course Rubric

Grade	Product	Process	Presentation	People	If this were industry
A	The design artifact is (one of) the best of all teams, likely used by the sponsor, and potentially worthy of a patent.	The design process is applied using appropriate tools that may require external research.	Presentations and reports are optimally clear, complete, and concise.	The team functions as a single unit	This grade is reserved for individuals or teams whose work would likely lead to a promotion.
B	The design artifact is useable and has clear attributes beyond just meeting minimum requirements.	The design process is applied using appropriate tools, demonstrating a good understanding of the design process.	Presentations and reports are complete, and reasonably clear and concise.	The team is efficient and well-organized.	This grade is earned by students or teams whose work would likely lead to a bonus or a raise.
C	The design artifact works.	The design process is applied nominally using some design tools.	Presentations and reports are complete and without error.	The team is functional.	This grade is earned by students or teams whose work would likely be nominally acceptable in industry. While it is acceptable, it will not lead to advancement.
D	There is some doubt as to whether the design artifact works, or it works marginally.	The design process is applied without use of any design tools.	Presentations and reports lack some clarity or key information, or have minor errors.	The team is not a team, but individuals working on the same project. Absences are frequent.	The team or individual would be “put on notice” of their performance.
F	The design artifact does not work.	There is no demonstrated use of the design process.	Presentations and reports are inadequate.	The team is dysfunctional.	This grade is used to identify those individual or teams whose work would likely lead to dismissal from industry.

The weighting for each will be determined by your advisory committee based on the project and other factors. The final grade is based on final performance, with no interim grades. However, before the drop-date, a student may *request* a current state grade based on performance to date. The student or team must understand that this will only be a prediction based on current assessment, not a promise. The teams and students will be evaluated in an absolute, not relative manner. Every student can **earn** an A and every student can **earn** an F.

Clarification

There are misconceptions that should be clarified here with respect to this course¹:

1. **Misconception:** The advisory committee and/or the sponsor know exactly how to “do” the problem and what “the answer” should be, and could make the whole process better by just telling the students how to address the problem.
 - **Response:** It is not the committee’s nor the sponsor’s job to tell you exactly how to do the problem, so whether they know or not is irrelevant. It is, however, the committee’s job to assess your approaches to the problem and to help you when you cannot proceed on your own. It is crucial to remember that the committee is not required to volunteer information which is not requested, or to answer questions which are not asked. Learning by doing is a significant part of ME 402.

¹ This is paraphrased from the ME 401 course syllabus of Dr. Beasley, Fall 2007

2. **Misconception:** My results are better than Joe's, but he got a higher grade.
 - **Response:** Results presented in an industrial setting will be carefully evaluated based on how well you support those results, and how well they are presented. "Trust me" will not cut it when real money is at stake! Remember that all your committee knows about the results is what you tell him or her.
3. **Misconception:** Effort is to be rewarded. For example, if you spend 80 hours working on a project, but have no results, you "deserve" a good grade.
 - **Response:** Consider two competing designs for a bridge. The first design required 1000 man-hours to accomplish, while the second required 500 man-hours. Suppose we built both bridges. The first bridge collapses under its own weight, while the second stands for 100 years. Clearly, in engineering practice, results are what count and amount of time spent is not relevant. **WORK SMART!**

3. DESIGN

The following represents a classic design process. The team may use this as both a general checklist and measure of progress.

1. Planning
2. Problem Definition
3. Conceptual Alternatives
4. Embodiment Design
5. Execution
6. Decompression

Planning:

The team should plan how they will complete and test their design. The timeline should be refined and detailed for the remaining weeks. In their planning the team should include concurrence from any external support including their prediction for when they can complete their work. Project planning includes more than timeline development, it includes definition of the meeting minutes, format approval for all documentation, clarification of consequences for not delivering work product to the team in time, budget development, sharing of capabilities and interests, agreement on the mode and frequency of team communication, and other “house keeping” activities. This is a critical activity that, done well, can ensure success with equally distributed design effort. If done poorly, student teams scramble at the last minute, putting in 80 hour weeks at the end of the semester to deliver barely acceptable products.

Problem Definition:

By the end of this phase, the team should have defined the design challenge quantitatively as design specifications. These include constraints, which *must* be met, and criteria, which are used as a basis for selecting among design alternatives. The method of determining performance against these specifications should be defined. In a way that minimizes the customer’s (sponsor’s) burden, the customer should be consulted so that they may ultimately agree upon these specifications, their relative importance, and how they will be evaluated. A tentative time schedule and project plan should be part of this phase of the design process.

Contingencies: *Unexpected events are common in the design process. The team should have contingencies in mind for surprise test results and delayed support. The Project Plan and Timeline should be revised when contingencies are exercised.*

By the end of this phase, the team should **understand** the context of the design challenge. If the challenge is to fix a problem, the root cause should be known. The operational environment should be fully defined.

Once a problem statement and list of requirements have been written, these should be revisited constantly to guarantee that the design team remains focused on the identified needs. Furthermore, the requirements list should continually be updated with more constraints and criteria as the design evolves. This document forms the skeleton of the design process and should be recognized as one of the most important documents that the design team generates throughout the semester project.

Conceptual Alternatives:

The team should develop a list or chart of concepts that may satisfy the design specifications. Multiple idea generation tools are available. Using progressively more thorough design specification filters, that list should be pared down to several alternatives with the highest potential. A final filter, or decision analysis, based on some preliminary synthesis, or even some simple physical tests, should select the final one or two choices.

The requirements enumerated in the problem statement are the only ones that may be used to evaluate the concepts. If, in the evaluation, design concepts are judged to be equivalent, then additional criteria may be added to the requirements list for further delineation between concepts. These changes should be approved by the industry sponsor if significant.

Prototyping can be used to explore aspects of concepts that are not easy to evaluate analytically.

Embodiment Design:

The team should expand several solutions (at least two) to a level of detail where design variables may be assigned specific values. Each solution should be analyzed and synthesized to confirm its performance against the design specifications. Based on this, the team may have to select a new solution, remembering that design is an iterative process. The vast majority of your undergraduate curriculum has focused on this stage of design.

Detailed Design:

Detailing a design solution includes prototyping, testing, and reporting to the customer. Plan for disposition of your prototype and get concurrence from those that must support it. This stage focuses on final work product deliveries and includes manufacturing plans, bills of materials, assembly and part drawings, and a full economic analysis.

Decompression:

Lessons learned from this project should be recorded for use in future projects. Contributors to the project should be personally recognized, potentially with a memo to their management if the support was exemplary.

4. COMMUNICATION

Communications are essential to teams, whether they are you and your fellow worker, you and your customer, or you and anybody else with whom you function interactively. The communications, which will be part of this course, are:

Email, written communications:

Please give copies of any you generate to your Advisors. The advisory committee will specify if they wish to be included in any and all e-mail correspondence with the industry sponsor and suppliers. A comprehensive notebook containing this information is **required** for a passing grade in this course.

Regular Presentations:

These will be typically less than one half hour (per team) slide or poster presentations of project progress. Include a written abstract or executive summary of up one page submitted at least **24 hours before the meeting**. The purpose of these presentations is to (1) keep the advisory committee aware of your progress, (2) garner external feedback on your work, and (3) enforce continual advancement on the project. The following is recommended:

- Assume one minute per slide or poster, and half of the time for questions and answers.
- Do not rewrite the presentation each time, but develop it over time into your final presentation.
- Attempt to have each team member present an equal portion.
- Include on each “page” (slide or poster) the following information:
 1. Identification information such as “Clemson”, customer, project name, team identifier,
 2. Tracking information such as page subject, page number out of total page count, date of page creation or presentation,
 3. Contact information such as Page Owner(s) and email or phone number of Page Owner(s)
- Explicitly include in the presentation anything you need from the Advisors along with a deadline.
- The project status is required and should be presented in the form of a GANTT chart with last week’s status, the current status, and the defined deliverables for the following week.
- A budget update, including expended and encumbered monies, should be included in every presentation.
- Provide advance copies (preferably 24 hours, but subject to advisory committee preferences) to the Advisors.

Depending on the project or team progress, especially in the beginning of the project, presentations may be weekly. Expect some form of feedback on progress from your Advisors within one week.

Interim and Final Report

It is recommended that the Interim Report be, for the most part, a preliminary draft of the Final Report with some exceptions. Samples of previous reports, as selected by your advisory committee, will best serve to illustrate what is expected. It is suggested that the Interim report be submitted to the advisory committee the week of February 15, 2010 to allow for time to review the reports before

midterm grades are due, however the specific due date is left to the discretion of the Advisory Committee. The final report should be submitted to the advisory committee **at least one week** before the final customer presentation (approximately April 12, 2010). The final presentation will be scheduled for Thursday, April 22, 2010, unless conflicts with the sponsor require otherwise. The advisory committees are responsible for organizing the final presentations: including scheduling, reserving rooms, inviting the customer, and arranging for videotaping of the final presentations.

Individual Reports and Final Interview

Before your final presentation, provide your advisory committee with up to one page including:

- The words “Individual Report”, your name, a team identifier, and date.
- Your assignments and special contributions.
- Your hours spent on the project and the percent you contributed to the project in time and in accomplishment, which may be different. For example, you may have made a great discovery which only took you a few minutes but contributed greatly to the success of the project.
- For each other member of the team, you will estimate their percentage contribution in time and accomplishment if different.
- Section 10 includes examples for peer evaluation forms that will be submitted separately from the individual reports.

Personal and Team Notes

Throughout the project, you should record individual and team notes. These should be available for review at any time by the advisory committee. They should include such items as decisions, task assignments with due dates and team member responsible, and contact names with phone number and/or email.

In recent projects, the sponsoring company has decided to pursue patents on the work that the students developed. Thus, all individuals are required to maintain a complete and comprehensive design journal. These will be examined weekly by your advisory committee. It is your responsibility to provide these documents to the advisory committee at the review meetings. Failure to maintain an updated design journal may result in failure of the class.

Intellectual Property

Every project and team has the potential to develop Intellectual Property (e.g. patents). If you do, it is important that the property be immediately recorded, dated, and witnessed. It is strongly recommended for this reason that each student develop a design journal that documents every idea with dates and descriptions.

As stated in the Undergraduate Manual under the “Patents and Copyrights” Section: “All students enrolling in Clemson University do so with full understanding that:

“The University has full ownership rights in any inventions, discoveries, developments and/or improvements, whether or not patentable (inventions), which are conceived, developed, or reduced to practice or caused to be conceived, developed, or reduced to practice by undergraduate students during the course of their academic activities conducted as part of any undergraduate curriculum.”

5. TEAMWORK

Following are some attributes of a properly functionally team:

- Each team member knows clearly his or her assignment and when it must be completed. That assignment is completed on time, or, if not, the team member is warned immediately and corrective action taken. This should be handled internal to the team as possible.
- For team members whose task completion depends on other team members, the team member in need of support communicates directly to the supporting team member that dependency and its due date.
- Assignments of tasks to team members are negotiated and based on talents and interests. Work load is balanced.
- Team members respect each other, and meet commitments. Ideally they have fun.

Should the team “cover” for dysfunctional and non-contributing team members, the team suffers. The other teammates are required to do more work to compensate. However, it is the responsibility of all of the team to ensure that each member contributes. It is not acceptable at the end of the semester to claim that an individual was not contributing throughout. This is a sign of poor teamwork and the entire team will be penalized. For this reason, you must keep the advisory committee advised of any problems as they occur rather than disguising them.

6. BUDGET INFORMATION

In an attempt to introduce the realism of fiscal control into this course, a supply budget is established for each student design team. The Department of Mechanical Engineering provides each team an allocation in the amount of \$500.00 for the purpose of acquiring the supplies and services required for design project execution. These funds are **NOT** available in the form of cash; rather, disbursements are made in the form of vouchers to be secured through the Course Comptroller (Renee Gibson) in room 102 Fluor Daniel. Reimbursement forms are included in the Appendices.

Finally, it is **required** that a weekly encumbered budget printout be provided to the advisory committee at the weekly meetings. These may be requested from Ms. Gibson 24 hours in advance of the meetings. If these reports are not filed with the advisory committee, then no monies will be released for your project. This report is required by the second advisory meeting, the week of January 18, 2010.

Typical project-related items for which budgeted funds may be used include the following:

Telephone Calls

Telephone calls to the sponsor or others you are working with may be made (primarily by team leaders) using the student telephone provided in 104 Fluor Daniel. Please take the time to familiarize yourselves with the telephone system. Telephone records are important for accounting purposes and are maintained by the Comptroller.

Copies

You may **NOT** use the Departmental photocopy machines located in 104 or 217A Fluor Daniel. For assistance in securing photocopies, see the Comptroller.

Travel

Trips are, in general, to be organized and scheduled using University Motor Pool vehicles. If team members elect to visit a sponsor plant, prior arrangements are to be made with plant personnel. Your advisory committee should be advised in advance of your plans to travel to sponsor facilities or elsewhere. You will be assisted in securing Motor Pool vehicles by the Comptroller. It is strongly suggested that you arrange vehicle reservations at least one week in advance.

Other Purchases

Purchases relative to your project are to be made in strict accordance with Departmental procedures, the details of which will be provided to you by the Comptroller who will also maintain a strict accounting of all expenditures. Information regarding purchases should be submitted to the Comptroller as they occur; the **last time** at which records of purchase will be accepted for accounting is **1:00 p.m., April 23, 2010**.

Special Notes

- Do **NOT** pay cash out of pocket for any project-related item; reimbursement may be difficult or impossible.
- Any “overrun” of the team budget must be handled internal to the project team, as no reimbursement will be made for costs exceeding the provided budget.

7. DOCUMENTATION

Documentation of work is critical for engineering design to be successful. If it is not documented, then it never happened. To help facilitate this process, in the absence of a good corporate document exchange server, student teams will be provided with an USB stick that has preinstalled folder structures and file templates. The use of this USB stick is **REQUIRED** and the use of web-enabled external document storage systems should be avoided to ensure company confidentiality and security. This is to be used to capture every piece of information generated throughout the design project, saving each file under different version names. This USB stick will be submitted to the advisory committee by April 23, 2010. All meeting minutes, phone logs, e-mail correspondence, solid models, analytical models, design reports, executive summaries, and other documents should be stored on this drive. If additional space is required, we can provide you with additional sticks.

The following documentation is required of the students throughout and at the end of the semester. Failure to provide complete documentation to the advisory committee will result in a FAILING grade.

- Weekly Documentation that must be provided the advisory committee
 1. Executive Summary
 2. Project Plan (GANTT Chart)
 3. Budget Report
 4. Expense Report (spreadsheet from Comptroller)
 5. Design “mini-reports” – testing procedures, test results, concept reports, etc.
 6. Individual design notebooks for dating/signing by advisors
- Preliminary Design Review Meeting
 1. Design Report (including appendices)
 2. Individual Report on contributions
 3. Peer Evaluations
- Final Design Review Meeting
 1. Design Report (including appendices)
 2. Folder with all meeting minutes
 3. Folder with all e-mail communications
 4. Folder with all design reports
 5. CD/DVD with all documentation
 6. Individual Report on contributions
 7. Peer Evaluations

8. SUGGESTED READING

Design Process

Asimow, M., (1962), *Introduction to Design*, Prentice-Hall; Englewood Cliffs, NJ.

Dym, C., Little, P., (2000), *Engineering Design: A Project-Based Introduction*, John Wiley and Sons, New York, NY.

Pahl, G., Beitz, W., (2003), *Engineering Design: A Systematic Approach*, Faller, New York, NY.

Ullman, D., (2003), *The Mechanical Design Process*, McGraw-Hill Inc., New York, NY.

Woodson, T., (1966), *Introduction to Engineering Design*, McGraw-Hill Book Co., New York, NY.

Product Development

Cagan, J., Vogel, C., (2002), *Creating Breakthrough Products*, Prentice Hall, Upper Saddle River, NJ.

Otto, K., Wood, K., (2001), *Product Design: Techniques in Reverse Engineering and New Product Development*, Prentice Hall, Upper Saddle River, NJ.

Pugh, S., (1991), *Total Design: Integrated Methods for Successful Product Engineering*, Addison-Wesley, Reading, MA.

Design Tools

Adams, J., (1986), *The Care and Feeding of Ideas: A Guide to Encouraging Creativity*, Addison-Wesley, Reading, MA.

Adams, J., (1986), *Conceptual Blockbusting: A Guide To Better Ideas*, Addison-Wesley, Reading, MA.

Cohen, L., (1995), *Quality Function Deployment: How to Make QFD Work for You*, Addison Wesley Longman, Inc., Reading, MA.

Love, S., (1980), *Planning and Creating Successful Engineering Designs*, Van Nostrand Reinhold Co., New York, NY.

Phadke, M., (1989), *Quality Engineering Using Robust Design*, Prentice-Hall, Inc., Englewood Cliffs, NJ.

9. RESEARCH CONTRACT

A contract is prepared for every design project that is sponsored by industry. An example of this contract is provided for your benefit. You will be expected to sign a similar contract for your specific project. As with any contract, be sure that you read and understand all the details contained within the contract.

CLEMSON UNIVERSITY
SPONSORED STUDENT PROJECT
AGREEMENT

1. Parties to the Agreement

- a. Clemson University, a South Carolina, public, post-secondary education, research, and service institution with business offices at 300 Brackett Hall, Clemson University, Clemson, SC 29632-5701 hereinafter designated Clemson.
- b. "Sponsoring Entity" a with business offices at , hereinafter designated Sponsor.

2. Premises

- a. WHEREAS, CLEMSON recognizes the educational value of activities that provide practical problem solving experience in a professional situation for its advanced students; and
- b. WHEREAS, CLEMSON encourages qualified students to enroll in such activities and for which students earn academic credit; and
- c. WHEREAS SPONSOR, in the regular conduct of its business activities encounters problems for which it seeks solutions; and
- d. WHEREAS, working in teams to develop solutions for certain of these problems provides an ideal activity for qualified students to obtain valuable, practical experience while earning academic credit and to provide Sponsor with one or more novel approaches/solutions to the problem; and
- e. WHEREAS, CLEMSON desires to expand opportunities for students to participate in problem solving activities and Sponsor is willing to provide opportunities for participation to qualified Clemson students and to provide nominal support to Clemson in support of such students activities;

NOW, THEREFORE, in consideration of the terms and conditions hereof, the adequacy and sufficiency of which are acknowledged and accepted by each party, Clemson and Sponsor agree as follows with respect to Sponsor's cooperation in support of student participation in practical problem solving academic activities.

3. Purpose, Organization of Document, and Construction and Specific Definitions

- a. The purposes of this Agreement are to establish the general terms and conditions under which Sponsor will disclose problems to be used as the subject matter of and basis for one or more problem solving activities for teams of students; to define the scope and limits of the student activities, and to define the obligations of the parties.
- b. The general organization of this document, including headings, is for convenience and clarity and shall be accorded no special consideration in the construction or interpretation of this Agreement. For purposes of construction, the singular form shall include the plural and gender references shall be mutually inclusive.

- c. The effective date of this Agreement shall be the latest date on which an AUTHORIZED REPRESENTATIVE of Clemson or Sponsor executes duplicate original hereof. The terms and conditions hereof shall remain in full force until modified in a mutually signed writing or terminated by either party on thirty (30) days written notice to the other party. Such termination does not relieve either party of obligations for projects currently in progress.
- d. The terms and conditions hereof apply to any "Appendix A" following the form and format herein specified when such Appendix is properly executed by an AUTHORIZED REPRESENTATIVE of each party. The AUTHORIZED REPRESENTATIVE for each party will be specifically designated as the "AUTHORIZED REPRESENTATIVE" in each Appendix A. This Agreement is specifically incorporated by reference to each such Appendix A.
- e. Words, terms and phrases shall be accorded their usual or common meaning unless otherwise defined herein, and terms of art shall be accorded their recognized, unique definition as used professionally. For purposes of this Agreement:
 - i. AUTHORIZED REPRESENTATIVE means an employee of each party, other than the Sponsor Point-of-Contact and the Instructor-in-Charge, who is authorized to legally bind that party.
 - ii. PROJECT STATEMENT means the two-part element of this Agreement identified as Appendix A in which the first part defines the academic administration of student projects and the second part describes the technical and financial aspects of the student project, including a description of the field of study or technology of the problem to be addressed in the activity, and the deliverable report(s) anticipated as a result of completing the activity; this second part shall be considered to comprise the accepted "SCOPE OF WORK" statement for the project, as that term is used in sponsored activities. An example specimen of Appendix A is appended hereto as Appendix A sample.
 - iii. TEAM means two or more students with appropriate academic experience that will work jointly to solve the Problem and prepare all results and findings. More than one team may work on the same problem at the same time, but each team functions independently of other teams.
 - iv. PROBLEM means the practical technical/commercial issue or question based on a real situation affecting and posed by a Sponsor as the basis of a Project for one or more teams; PROBLEM STATEMENT means the written description of the problem which may include information designated as CONFIDENTIAL INFORMATION. The parties agree that special consideration shall be given to ensure that PROBLEMS posed by Sponsor do not involve subject matter that, if accidentally disclosed, would negatively impact Sponsor's competitiveness in the marketplace.
 - v. DELIVERABLE means the REPORT and, if appropriate, certain tangible products directly associated therewith developed by members of a student team working

on a PROJECT addressing a PROBLEM. DELIVERABLE specifically excluded the notes, diagrams, and material developed by individual students and not included in the report. The parties acknowledge and agree that DELIVERABLES expressly exclude any commercial prototype(s) or other device and/or mechanisms intended for the stream of commerce. All DELIVERABLES constitute the result of student research and are provided "AS IS" without any warranties. Sponsor warrants that it shall not use DELIVERABLES for any commercial purpose.

- vi. CONFIDENTIAL INFORMATION means any information provided by Sponsor to the Instructor- in-Charge or directly to the members of a team, in a tangible form, that is clearly marked as CONFIDENTIAL INFORMATION. Information disclosed in a non-tangible form (orally or as a result of a site visit, for example) may be considered CONFIDENTIAL INFORMATION when at the time of disclosure it is identified by the disclosing party as confidential and within thirty days following such disclosure, the disclosing party sends to the INSTRUCTOR-IN-CHARGE a written, signed summary of the disclosed information and indicating to whom, how, when, and where such disclosure was made.
- vii. SCOPE OF WORK (SOW) means a written statement defining the range or extent of activities/efforts as limits to the activities to be undertaken by a team in addressing the problem. The parties agree that all Scopes of Work shall contain, at a minimum, the terms identified in Appendix A to this Agreement.
- viii. INSTRUCTOR-IN-CHARGE means a member of the Clemson faculty assigned the responsibility to supervise the students that will receive academic credit from participating on a team.
- ix. SPONSOR POINT OF CONTACT means an employee of Sponsor designated by Sponsor to work with Clemson in formulating problems, evaluating reports, and generally cooperating in the interest of success of the students' educational activities.
- x. TECHNICAL CONSULTANT means a qualified professional not employed by either Clemson or by Sponsor who may meet with and advise students regarding technical matters related to their Problem and who will have access to all Confidential Information received by students as well as concepts, ideas, and data developed by individuals and by the team.
- xi. REPORT means the DELIVERABLE and shall consist of the composite written work product submitted by a TEAM describing the material, methods, results, and conclusion(s) reached in its PROJECT involving a designate PROBLEM.
- xii. PROJECT means the efforts and results of team members studying a PROBLEM, including methods, and studies carried-out in team efforts to find a resolution to the PROBLEM. Each Project shall be conducted during a designated academic term at Clemson under the supervision of a Clemson faculty member who shall

serve as Clemson's Instructor-in-Charge and will conduct the Project with such undergraduate and graduate students as he/she deems appropriate.

4. Confidentiality and Standard of Care

- a. Clemson, including students participating in the Program, shall protect Confidential Information using the same standards of care it would use to protect its own similar confidential information, and in no case will that standard be less than of a reasonable person similarly situated. The Instructor-in Charge shall notify/remind students of their obligations of confidentiality.
 - i. Clemson shall identify each potential Technical Consultant and the project(s) on which he/she may provide advice prior to disclosing any confidential information to such Technical Consultant, and Sponsor may object for documented reasons to such Technical Consultant and require Clemson to appoint an alternate.
 - ii. Clemson shall require the Technical Consultant to execute a Non-Disclosure Agreement to protect both Sponsor's interests and Clemson's obligations of confidentiality to Sponsor.
 - iii. Subject to the terms of paragraphs 4.a.i. and 4.a.ii., above, Sponsor hereby grants to Clemson the right to disclose confidential information provided by Sponsor to Clemson at any time to the Technical Consultant advising such team, but to none other.
- b. Subject to the education/research use rights of paragraph 6, below, retained by Clemson, Clemson shall not, without the express, written permission of Sponsor, publish or make public in any form or medium any of the data, results, conclusions, ideas, concepts, or recommendations embodied in the FINAL REPORT of a team, or on which such FINAL REPORT is based, for a period of twelve (12) months commencing on the date a copy of such FINAL REPORT is made available to Sponsor, and prior to that date, all ideas, data, concepts shall be considered and treated as Clemson's Confidential Information and protected as such.
- c. Neither Clemson nor Sponsor shall use, directly or by implication, the name of Clemson University, or the name of any Department, College or member of the faculty or staff thereof, in any publicity, publication or advertising material without Clemson's prior written approval. Requests for such approval shall be submitted to the Office of General Counsel, Clemson University. Similarly, Clemson will not use, directly or by implication, the name of Sponsor, its affiliates, or the name of its employees, in any publicity, publication or advertising material without Sponsor's prior written approval. Requests for such approval shall be submitted to the Sponsor's .
- d. Notwithstanding anything to the contrary, nothing in this Agreement shall prevent a student from publishing his or her dissertation or other University required academic work. In the event the twelve month confidentiality period referenced in paragraph 4b. above, prevents a student from meeting a critical publication date related to his or her academic requirements, Clemson shall provide a copy of such publication to Sponsor to

allow Sponsor to review and identify any Sponsor confidential or proprietary information and request removal of such information. Sponsor shall cooperate with Clemson to provide feedback within 30 days of receipt of any proposed publication.

5. General Terms and Conditions and Mutual Obligations

- a. This document expresses the general terms and conditions under which a Scope of Work statement will be performed.
 - i. Until this document is formally terminated, the terms and conditions of this Agreement may apply to an indefinite number of Project Statements individually agreed to by Clemson and Sponsor during the life of this Agreement.
 - ii. This Agreement may be terminated on 30 days notice by the terminating party to the other party, but such termination shall not affect any obligations incurred by a then active SOW statement.
- b. The Project Statement when signed by an AUTHORIZED REPRESENTATIVE of Clemson and Sponsor constitutes the performance obligations of each party subject to the terms and conditions hereof.
- c. Periodically, as they may agree, the Sponsor Point of Contact and Instructor-in Charge shall meet and review/evaluate potential problems available from Sponsor.
 - i. Review shall include, but not be limited to appropriateness of the problem for potential students and whether such problem can reasonably be addressed in time allocated for student participation.
 - ii. Sponsor is not obligated to propose problems for any academic semester, nor is Clemson obligated to accept any problem suggested by Sponsor.
 - iii. Problems presented must conform to Clemson policies applicable to student projects, e.g., Sponsor may not use federal funds to support student projects.
- d. Instructor-in Charge and Sponsor Point of Contact shall meet periodically as they deem appropriate to review student progress and problems, and Sponsor Point of Contact may attend class meetings at which students present/discuss problems and progress. Nothing herein suggests that the students must independently address the problem.

6. Ownership Rights

- a. By institutional policy, Clemson claims ownership of the work product (including reported data and potentially patentable technology) of students produced, created, or otherwise generated and included in any formal report submitted in partial satisfaction of course requirements of a course in which such student is enrolled for credit.
 - i. This claim of ownership specifically includes the reports submitted by student members of a team addressing a problem proposed by Sponsor and extends to all models, prototypes, and technology resulting from the Project and directly and exclusively related to the FINAL REPORT.
 - ii. Clemson does not claim ownership of the notes and similar personal records of individual members of a team developed as a result of participating as a team

member except as such may be directly incorporated into the FINAL REPORT submitted by the team.

- b. Sponsor shall pay Clemson the sum of seven thousand five hundred (\$7,500) dollars, for each Problem proposed and supported by Sponsor and accepted by Clemson and assigned to a Team. Each Problem shall be assigned as a Project for which a FINAL REPORT must be completed in partial satisfaction of the course as described in Appendix A. Clemson agrees, for each Problem described above, to grant to Sponsor for a period of twelve months from the date Clemson delivers to Sponsor a full and complete copy of the FINAL REPORT submitted by each team addressing the same Problem proposed by Sponsor, a fee-free, royalty-free, exclusive license and right to use, practice, and enjoy any and all technology embodied in the FINAL REPORT with such use being restricted to the internal use and/or evaluation by Sponsor. During this period, Clemson shall treat the report, data, findings, and the like as CONFIDENTIAL INFORMATION and shall refrain from publishing and/or disclosing such Information in any form.
 - i. At any time during the above defined period of one year, on payment of an additional seven thousand five hundred (\$7,500) dollars to Clemson by Sponsor, Clemson shall assign to Sponsor all rights, title, and interest it owns in the FINAL REPORT, including plans, and diagrams (if applicable) presented by team members working on a Problem proposed by Sponsor as reflected in a designated Appendix A. Sponsor shall enjoy the right to prosecute/secure, in its name, intellectual property protection on a world-wide basis as it deems appropriate with no further obligation to Clemson.
 1. Clemson shall execute all necessary documents to effect and record such assignment.
 2. Clemson shall work cooperatively with Sponsor in locating Team members so Sponsor may secure the necessary signatures and documents as required and provided by Sponsor.
 3. If Sponsor fails to exercise its rights of assignment after the designated period of one year, Clemson may, at its expense, pursue intellectual property protection of the technology embodied in report, and related materials without any obligation to Sponsor.
 - ii. Sponsor may prosecute protection of any improvement/modification of the technology embodied in the FINAL REPORT, including plans and diagrams so long as the members of a team are not designated as inventors on any US or foreign patent application, or comparable document. If, however, the members of a team are identified as inventors in an application then Sponsor remains obligated pursuant to Article 6.b.i hereof.
- c. Any other terms of any license, assignment, or similar instrument notwithstanding, Clemson retains a perpetual, irrevocable, fee-free, royalty-free, non-exclusive license and right to use and practice any and all technology, data, concepts, conclusions, or

information whatsoever arising from the student work product embodied in or resulting from the efforts of students addressing a Problem proposed by Sponsor; such rights include publication rights as limited by Article 4.b of this Agreement.

7. Duties and Obligations of Clemson

- a. Clemson shall regularly offer courses in which students may earn academic credit for participating as a team member working on a Problem and submitting at least a FINAL REPORT regarding solution of the Problem.
- b. Clemson shall assign a qualified faculty member as the Instructor-in-Charge to supervise the course. The Instructor –in-Charge shall be the primary point of contact for Sponsor Point of Contact regarding administrative or Problem related matters.
- c. Clemson shall inform Sponsor of class meeting times and encourage Sponsor Point of Contact to participate with students in addressing the Problem.
- d. Clemson shall require the members of each Team to submit a single report in which results and recommendations concerning resolution of the problem are presented, and immediately on evaluating and grading such report, Clemson shall forward a copy of the same to Sponsor as the deliverable.
- e. Clemson shall notify Sponsor Point of Contact of the time and place at which team members will participate in the presentation and defense of reports.
- f. Clemson shall require each student to execute a formal assignment of results and the report to Clemson.
- g. Clemson shall, for at least one year following completion of the Project maintain records of employment and locations of team members as far as is reasonably possible so that each member may be contacted to execute any necessary forms required by Sponsor to prosecute intellectual property protection of information/technology embodied in the report.
- h. Clemson shall fully explain to members of all teams the patent process and the importance of maintaining contact with Clemson and shall, at Sponsor's request and using Sponsor's documentation, require each team member to sign a binding Agreement with Sponsor to cooperate with Sponsor in sponsor's efforts to secure patent or other intellectual property protection.

8. Duties and Obligations of Sponsor

- a. From time to time, Sponsor will propose problems sponsor believes to be appropriate for student projects.
- b. Sponsor Point of Contact will communicate and/or meet with Instructor-in-Charge to review proposed problems.
- c. Sponsor Point of Contact will participate in student meetings to discuss problem and in meeting at which FINAL REPORTS are presented and defended.
- d. Sponsor Point of Contact will arrange for appropriate information and materials of Sponsor to be provided to team to address the problem and as appropriate to site visits to Sponsor's facilities as may be appropriate and agreed to by the Instructor-in-charge.

- e. Payment shall be made on receipt of an invoice from Clemson, provided with or immediately after any Appendix A is executed with regard to the Project support and within 30 days of Sponsor's decision to exercise its rights of assignment herein granted.

9. Export Control

Both parties agree to abide by the requirements of the International Traffic in Arms Regulation (ITAR), the Export Administration Regulation (EAR), and all other applicable export control regulations of the United States of America. As needed, before a Project commences, Sponsor will inform Clemson in writing of the US Department of Commerce Export Control Classification Number and/or the US Department of State Munitions List Categorization (if any) of any technology or technical data that Sponsor discloses to Clemson or permits Clemson to utilize under this Agreement. If Sponsor learns of an export classification by the US or another government during the course of the Project, Sponsor shall inform Clemson of such promptly.

10. Publication

Subject to the terms in Article 6, above, Clemson shall have the right, at its discretion, to release information or to publish any conclusions and other material resulting from the Project, except for Sponsor's Confidential Information while under the obligation of confidentiality. Clemson shall provide Sponsor a copy of any proposed publication thirty (30) days in advance of the proposed publication date for review and protection of the potential patentability of any intellectual property described therein, and for the deletion of any inadvertently included Sponsor Confidential Information. Sponsor may request an additional thirty (30) days' delay. Such delay shall not, however, be imposed on the filing of any student thesis or dissertation.

11. Termination

This Agreement may be terminated by either party at any time by providing the other party written notice thirty (30) days in advance of the proposed termination date. If any Project is underway at the time of termination, Clemson shall invoice for costs associated with such termination, including non-cancelable commitments incurred prior to receipt of the termination notice and all expenses through the end of the current academic period which have not been reimbursed.

12. No Warranty; Indemnity; and Limitation of Liability

- a. CLEMSON MAKES NO WARRANTY, EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, AS TO ANY MATTER WHATSOEVER, INCLUDING, WITHOUT LIMITATION, INFRINGEMENT AND THE DESIGN, USE, ORIGINALITY, FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR ACCURACY OF THE RESEARCH OR ANY IDEA, INVENTION(S) OR PRODUCT(S), WHETHER TANGIBLE OR INTANGIBLE, CONCEIVED, DISCOVERED, OR DEVELOPED UNDER OR IN CONNECTION WITH THIS AGREEMENT.
- b. Sponsor shall indemnify and hold Clemson and its trustees, officers and employees harmless from and against any claim, demand, liability, damage, loss, or expense (including all reasonable attorneys' fees and expenses), incurred by or imposed upon them in connection with any third party claims, suits, or judgments arising out of or

resulting from this Agreement, including without limitation, Sponsor's breach of any obligation hereunder, its acts or omissions, and the use of the Project or its findings.

- c. Clemson shall not be liable for any damages (including indirect, special, incidental, consequential, punitive, or other damages), losses or expenses incurred or suffered by Sponsor or any third party, even if advised of the possibility of such loss or damage.

13. Miscellaneous

- a. Independent Contractor

Each party is an independent contractor. This agreement is not intended to create any agency, joint venture or partnership.

- b. Assignment

Neither party may assign its rights or duties under this Agreement without the prior express written consent of the other party; however, Sponsor may assign this Agreement to a successor in ownership of all or substantially all its business assets who expressly in writing assumes Sponsor's obligations hereunder.

- c. Force Majeure

Clemson shall not be liable for any failure to perform as required by this Agreement, to the extent such failure to perform is caused by any reason beyond Clemson's control, or by reason of any of the following occurrences: labor disturbances or disputes of any kind, accident, failure of any governmental approval required for full performance, civil disorder or commotion, act of aggression, terrorism or threat thereof, flood, fire, earthquake, act of God, explosion, shortage or failure of utilities, mechanical breakdown, material shortage, disease, or other similar occurrence.

- d. Entire Agreement

This Agreement and its appendices contain the entire agreement between the parties regarding the Project. In the case of inconsistency or conflict between the provisions of this Agreement and the preprinted terms and conditions of any purchase order with respect to the Project, the provisions of this Agreement shall control.

- e. Governing Law

This Agreement shall be governed and construed pursuant to the laws of the State of South Carolina without regard to its conflicts of law principles.

SIGNATURE PAGE FOLLOWS

14. Approvals
CLEMSON UNIVERSITY

SPONSOR

AUTHORIZED REPRESENTATIVE

AUTHORIZED REPRESENTATIVE

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Administrative Contacts:
CLEMSON UNIVERSITY

SPONSOR

Name: _____

Name: _____

Title: _____

Title: _____

APPENDIX A
SCOPE OF WORK
PART 2

1. Sponsor:
2. Sponsor Point -of -Contact: Name:

3. Address:

4. Telephone Number:

5. Email:
6. Project Title:
7. Problem Title and Description:
8. Required Pre-Existing Sponsor Technology (if any):
9. Deliverable Reports
 Description Due Date
 - a.
 - b.
 - c.
10. Special Terms (if any).

SIGNATURE PAGE FOLLOWS.

CLEMSON UNIVERSITY

SPONSOR

AUTHORIZED REPRESENTATIVE

AUTHORIZED REPRESENTATIVE

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Instructor-in -Charge:

Sponsor Point-of-Contact

Name: _____

Name: _____

Date: _____

Date: _____

APPENDIX II (MODEL)

Student Project Design Teams Spring Semester, 2010

Below are listed the members of the student project design teams addressing the **XYZ** problem at **CLEMSON** as a portion of their ME 402 coursework during the Spring Semester of 2010. By their signatures hereon, they attest that they have read and do understand the attached Agreement between **XYZ** and **CLEMSON**.

(PROBLEM TITLE)

TEAM 1 - A

Name: _____
Name: _____
Name: _____
Name: _____
Name: _____
Name: _____

TEAM 1 - B

Name: _____
Name: _____
Name: _____
Name: _____
Name: _____
Name: _____

TEAM 1 - C

Name: _____
Name: _____

Name:

Name:

Name:

Name:

TEAM 1 - D

Name:

Name:

Name:

Name:

Name:

Name:

**APPENDIX III
STUDENT ASSIGNMENT OF RIGHTS TO CLEMSON UNIVERSITY**

I have read and understand the Clemson University policy regarding the requirement to assign rights to intellectual property resulting from any work or project required in a course, as a condition of enrollment. In recognition of and compliance with the above summarized policy, I hereby assign to Clemson University, its successors or assignees, all of my rights, title and interest without reservation in the technology and know-how embodied in a report entitled "*ME 402 FINAL REPORT ON XXX*" (attached hereto as Appendix I) and including all laboratory notebooks, notes, models, diagrams, and prototypes as submitted in partial satisfaction of completion of course requirements of ME 402 at Clemson University Spring 2010 and dated April 2010. I make NO WARRANTY implied or express as to the marketability of any such technology or its fitness for a particular use and I make this assignment that Clemson University take the technology AS IS and assumes liability for damages arising from the use of the technology.

Subject to a limitation of a reasonable purpose, I hereby further agree to assist in the preparation and prosecution of any patent applications and to execute all documents that may be required to secure statutory protection of the assigned technology, and to this end, I agree that for period of three years following the effective date hereof, I will notify the Department of Mechanical Engineering, College of Engineering and Science, Clemson University of any change of my permanent home address as indicated below.

Signed: _____ Effective Date: _____

Name: _____

Current Mailing Address:

Street and No _____ Apt. No. _____

City: _____, State _____ ZIP _____ Country _____

Telephone: _____

Permanent Residence Address:

Street and No. _____ Apt No. _____

City _____, State _____ ZIP _____ Country _____

Telephone: _____

10. EVALUATION FORMS

Sample evaluation forms are included for your benefit. These include peer evaluation forms and industry sponsor evaluation forms. Each advisory committee will expect different forms of peer evaluation.

Design Team Weekly Assessment Spring 2010

This evaluation form is provided back to each design team after the weekly meetings. Copies of these assessments are maintained by the ME 402 course coordinator.

Project: _____

Team: _____

Date: _____

		Above Expectations	As Expected	Below Expectations
1 .	The team made technical progress in the past week.			
2 .	The team reported with an executive summary.			
3 .	The team communicated professionally.			
4 .	The team is functioning well.			
5 .	The team has provided a budget.			
6 .	The team has provided a project plan.			
7 .	The team is using design tools appropriately.			
8 .	Overall, the team is performing acceptably.			

Design Team Participation and Evaluation
Spring 2010

In order to provide a fair and accurate evaluation of the team member's participation in the Design Project, please complete the following form to the best of your ability. This form will be kept confidential. Fill in the percent contribution of each team member for the specified tasks.

Team Number	Your Name:	Team Member Name:	Team Member Name:	Team Member Name:	Team Member Name:
Interim Report (writing)					
Interim Report (editing)					
Problem Definition					
Conceptual Design					
Embodiment Design					
Detailed Design					
Prototyping					
Presentation (Interim)					
Final Fabrication					
Virtual Testing					
Physical Testing					
Final Report (writing)					
Final Report (editing)					
Meeting Attendance					
Team Leadership					
External Research					
Other					

**ME 402 Senior Design Project
Customer Review (Spring 2010)**

Team Information:

Team:

(1)	(2)	(3)	(4)
-----	-----	-----	-----

Team Members:

1.	
2.	
3.	
4.	
5.	

Reviewer Written Comments:

Oral Presentation Quality:

Oral Presentation Content:

Using the Grade Descriptions (see Section 0), please give us your opinion of the team grade.

TEAM GRADE: _____

Reviewer Name: _____

11. REIMBURSEMENT FORMS

These forms are required for reimbursement. Receipts and completed forms are to be submitted to Renee Gibson. You must have a faculty advisor signature before she will process any requisitions or reimbursements.