BME Design Courses
Progress Report Guidelines

Each team is required to submit weekly progress reports. The purpose of the report is to convey information about progress that is being made by the team as a whole, as well as individuals on the team. Even if 'no' progress was made during the time period, a report is required – a report of "no news" is still "news"!

These reports should be in the form of an e-mail:

* "to" field = BME faculty advisor, client
* "cc" field = members of the team not already in the "from" field,
* "subject" = Example: BME 200/300 Progress Report

You are required to use the following format for the progress reports (headings in bold):

* **Title** (brief identifier of the project)

* **Names**: all team members and the client(s), team roles identified

* **Date**: range of the reporting period

* **Problem Statement**: a concise statement should evolve over the course of the semester/project as necessary. This should not be copy/paste from the original project description.

* **Brief Status Update:** summary of progress report, overall team accomplishments and difficulties, notable expenses. Goals met and deviations from the project timeline. (This should also be included in the body of the email with the progress report to client/advisor/team)

* **Summary of Weekly Team Member Design Accomplishments**: These should be very specific details about discoveries, designs created, meetings held, etc. Note that there is a difference between activity and accomplishment – enumerate the accomplishments for the reporting period. Be as specific as possible (i.e. just "research" is not an accomplishment – what was researched and what was the significance of this research)

* **Time**: a concise accounting of time spent working on the project

* **Weekly/Ongoing Difficulties:** statement of any particular obstacles: technical, group dynamics, gathering information, facilities, etc. that the team or individuals are experiencing with respect to the project.

* **Upcoming Team and Individual Goals:** a concise statement of intended action to continue progress on the project - be specific, i.e. what will you research.

* **Project Timeline**: this covers the entire semester in reporting period blocks: this includes a concise plan of activities and anticipated time that will be spent working on the project for the remainder of the term. (Do NOT just recite the course schedule for the term. Show specific event markers & logical process flow). As needed briefly describe the goals for future periods, and accomplishments of past and current periods.

* **Expenses**: a concise accounting of the amounts and types of expenses incurred on the project. See: http://bmedesign.engr.wisc.edu/course/resources/#team_role_bpag

SAMPLE PROGRESS REPORT

Self-Disarming Suture Needle, Team SWAGE, BME 402

Client: Dr. Hands
Advisor: Prof. Awesome
Team: Dilbert *Dilbert@wisc.edu* (Leader)
Dogbert *Dogbert@wisc.edu* (Communicator)
Catbert Catbert@wisc.edu (BWIG)
Ratbert Ratbert@wisc.edu (BSAC)
Fishbert Fishbert@wisc.edu (BPAG)
Date: March 6 to March 12, 2019

Problem Statement

In order to prevent accidental needle "sticks" from a suturing device to a surgeon or staff member, a disarming or retracting sterilized suture needle must be developed that allows a reversible action when passing into and through the underlying subcutaneous tissue, dermis, epidermis, or other organ tissues in the body. The device must encompass all features of sharpness, stiffness, maneuverability, and size/shape variance as a conventional needle with the added safety of needle retraction. The goal is to permanently eliminate the risk of needle puncture and infection to the operator during procedures.

Brief Status Update

We were quoted $1500 to have our design fabricated (qty 10) professionally out of Nitinol. However, these would not be functional, but would show proof of concept.

Summary of Weekly Team Member Design Accomplishments

- Team:
  - Decided that priorities for Spring Break included 1) contacting Mark S. regarding prototyping, 2) selecting a journal or conference to submit a paper to, and 3) obtaining materials for prototyping. Ratbert was put in charge of contacting Pharmacia about obtaining some Healon, while Dogbert would try to get some Nitinol samples.
  - December's PDS document was updated and uploaded to the web site.
  - A team meeting was set for Tuesday evening, March 12. At this meeting, a new plan for obtaining the project goals will be discussed, the timeline will be revised,
- Dogbert
  - Talked to Mark S. on Tuesday, March 10. He worked out a deal with a prototyping company in Massachusetts, which he found through the Thomas Registry, to make about 10 first generation prototypes for about $1500. The first generation prototypes would not be surgically ready; they will only show that the concept would work. He could not remember the names of the Nitinol or prototyping companies that he worked with, but said he had the details written down at home and would be willing to share them. (15 min)
  - Dogbert tried calling Mark again on March 11, but he was out of the office, so Dogbert will try calling again tomorrow. (5 min)
- Catbert
  - Met with Brian Berg to discuss the properties of Nitinol. He gave her several articles to read, but none of them were especially helpful for this project. (1 hour)
- Dilbert and Ratbert
  - Both tried to find suitable conferences or journals to submit a paper to, but most of the deadlines have already passed. The best alternative may be to prepare a paper before the semester ends, and submit it for a conference next year, since Dogbert, Catbert, and Ratbert will still be here next Fall. (1 hour)
- Fishbert - No progress to report

SAMPLE PROGRESS REPORT

Weekly/Ongoing Difficulties

The holiday weekend made it especially difficult to reach many of the company contacts that we needed to talk to for this project, because they were on vacation. However, there should not be any problems reaching them this week.

Upcoming Team and Individual Goals

- All - Meet Tuesday, March 12 at 8:00 pm in the BME lab to 1) discuss project strategy, 2) revise the timeline, and 3) select a time for meeting with Dr. Hands.
- All - Finalize poster and any other tasks for Morgridge Center Symposium.
- All - Begin working on conference paper.
- All - OBTAIN PROTOTYPING MATERIALS!!
- Dogbert - Contact Mark S. regarding prototyping and Nitinol companies.

Project Timeline

Project Goal	Deadline	Team Assigned	Progress	Completed
Find mechanical properties of skin	2/1	Fishbert	100%	2/1
Find any new competing designs	2/1	All	100%	2/1
Develop testing plan	2/8	All	100%	2/3
Preliminary Presentations	2/8	All	100%	2/8
Preliminary Deliverables	2/13	All	100%	2/13
Needle Testing	2/8-2/22	Dilbert, Dogbert	100%	2/22
→Needle type 1 Test	2/22	Dilbert	100%	2/22
→Needle type 2 Test	2/28	Dogbert	100%	2/22
→→Needle Materials decision	3/1	All	100%	2/26
Find place to make Nitinol	3/7	All	25%	ARGH!
→Sharpness Test	3/7	All		
→Stiffness Test	4/3	Client's lab		
COMSOL Model	3/25	Fishbert, Catbert	25%	
Show and Tell	3/29	All	100%	
Needle manufacturing protocol	April 1	All	10%	
→Final functional needle Fabrication	April 22	All		
→Assembly of complete prototype	April 22	All		
Poster Presentations	April 26	All	10%	
Final Deliverables	May 1	All	10%	

→ Arrows indicated dependencies

Expenses

Item	Description	Manufacturer	Part Number	Date	QTY	Cost Each	Total	Link
Needle								
Shipping	Nitinol samples, 6” piece	NexMetal	#43394759	12/30	1	18.24	$18.24	http://
Housing								
Brass billet	Coating of housing	TEAMLab/Grainger	#23432	3/1	2lbs	6.00	$12.00	http://
HDPE	Inner core of housing 3"x3"x12"	TEAMLab/Grainger	#3464	3/1	1	5.30	$5.30	http://
Machining	TEAMLab time machining/mill	TEAMLab	n/a	3/15	2 hrs	60.00	120.00	n/a
Testing materials								
Sample skin	Measure force of piercing skin	SkinDaver	#5123	2/1	1	Free	$0.00	http://
Pig skin	Measure force of piercing skin	Bucky’s Butchery	n/a	4/1	1	Free	$0.00	http://
TOTAL:								**$155.54**