

# Male Barrier Model

Week 11: 4/3/09 – 4/10/09

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**Team Members:** Whitney Johnson – BSAC  
John Cheadle - BWIG  
Terra Gahlman – Communicator  
Nick Balge – Team Leader

**Advisor:** Professor Pamela Kreeger

**Client:** Dr. Marge Sutinen

**Next meeting:** 4/10/09, 1:15pm

## **Problem Statement:**

To design a portable teaching tool to demonstrate the strength of polyurethane and latex barriers, using weights and a scale.

## **Team Goals:**

Try to get into the shop to look at machines that will need to be used and look for materials that could possibly be of use. Look for other versions of the L brackets that currently seem to be the best idea for mounting the scale onto the poles. Look for something that could serve as the connection between the PVC pipe and scale (something that would fit securely into a hold drilled through the pipe might be best). Come up with a visual model for the base and purchase the dowels that will be inserted into the base. Brainstorm and research possible pellet-catching containers, and decide on the feasibility of something visually pleasing vs. simpler options. Meet with some of the client's students and test condoms with newly acquired lead pellets.

## **Individual Goals:**

John	Research and develop idea for pellet containment device
Whitney	Finish learn@uw tests for shop access, look for L brackets, glue, and dowels
Terra	Look for L brackets and glue, additional condom testing
Nick	Finish learn@uw tests for shop access, develop base model, scale-pipe attachments

## **Summary of Accomplishments:**

We have looked into building a simple Plexiglas pellet container and will discuss this further on Friday. We have all finished our learn@uw quizzes and are officially shop certified. We have nearly decided on L brackets for purchasing, which should take place in the near future, and high strength glue for the back of the scale has already been purchased. A visual model has been produced for the base, and dimensions will be decided upon after further discussion and measurement of the recently purchased dowels. The client's students have been brought up to speed on the project's progress. Testing of a couple condoms has taken place with rips occurring both near the top and bottom. The more successful test (bottom rip) produced the results of a 28.5 in. stretch and about 3 lbs held. The test in which the condom ripped at the

clamp actually held more weight: 3.4-3.5 lbs. Either way the lead that we have has been determined to be easily sufficient for our purposes.

**Difficulties:**

none

**Activities:**

4/3/09	Team	Met with client's students	0.75h
4/3/09	Team	Testing with new lead	1.25h
4/5/09	Whitney	Bough dowels and glue, researched L brackets	2.00h
4/5/09	John	Found funnels, researched pellet containment	2.50h
4/7/09	Terra	Researched L brackets and glue, tested condom	2.00h
4/8/09	Nick	Took learnuw@uw quizzed for shop access	2.50h
4/9/09	Nick	Developed base model, researched possible pipe-scale connections	1.50h
4/9/09	Whitney	Completed remaining learn@uw quizzes	1.00h

	John	Terra	Whitney	Nick	Team
Past Week	2.50h	2.00h	3.00h	4.00h	2.00h
Previous Total	23.00h	24.00h	23.00h	22.50h	17.50h
Total	25.50h	26.00h	26.00h	26.50h	19.50h

**Expenses:**

Item/work done	Price	Quantity	Shipping	Total
Alum. poles	\$7.99	2	\$8.64	\$24.62
Analog scale	\$33.39	1	\$6.87	\$40.26
10 lb lead pellets	\$33.69	1	\$9.26	\$42.95
Total				<b>\$107.83</b>