

# Dynamic Balance Device

**Date:** 01/23/2026 - 01/29/2026

**Client:** Mr. Daniel Kutschera

**Advisor:** Professor Monica Ohnsorg

**Team:**

Kat Sattel - Team Leader (sattel@wisc.edu)

Therese Kalt- Communicator (tkalt@wisc.edu)

Noor Awad - BSAC (nawad2@wisc.edu)

Freyja Heggeland - BWIG/BPAG (heggeland@wisc.edu)

**Problem statement:** Patients that have suffered strokes have a 25-30% rate of developing spatial neglect syndrome. Symptoms of spatial neglect syndrome include loss of awareness of the body in space. Our client, Dr. Kutschera, a physical therapist, helps patients to regain strength and balance following a stroke. The client seeks to develop a device that can be used to improve visual scanning and balance training that is an update from the previous yard-stick design. The device should be mutli-functional so as to help patients with varying degrees of need and be effective in the rehabilitation treatment.

**Brief status update:** The team began researching and familiarizing themselves with the project. The team also contacted the client to begin asking questions and coordinated a weekly team meeting time.

**Difficulties / advice requests:** None to report

**Current design:** None

**Materials and expenses**

None to report, see table below:

Item	Description	Manufac-turer	Mft Pt#	Vendo r	Vendo r Cat#	Date	#	Cost Each	Total	Link
Category 1										
									\$0.00	
									\$0.00	
Category 2										
									\$0.00	
									\$0.00	
								<b>TOTAL:</b>	<b>\$0.00</b>	

## Major team goals for the next week

1. Meet with the client
2. Continue research of previous semesters work as well as new research
3. Work on PDS

## Next week's individual goals

- Kat Sattel
  - Continue research
  - Compile list of detailed questions to ask client
- Therese Kalt
  - Continue research
  - Meet with client
  - Complete PDS
- Noor Awad
  - Begin to work on PDS
  - Work on list of questions for client and use client meeting to guide further research
- Freyja Heggeland
  - Continue research
  - Begin product design statement development
  - Compile list of questions for our client

## Timeline

Task	September				October					November				December	
	5	12	19	26	3	10	17	24	31	7	14	21	28	5	12
<b>Project R&amp;D</b>															
Empathize	X														
Background...	X														
Prototyping															
Testings															
<b>Deliverables</b>															
Progress Reports															
Prelim presentation															
Final Poster															
<b>Meetings</b>															
Client															
Advisor	X														
<b>Website</b>															
Update	X														

**Filled boxes** = projected timeline

**X** = task was worked on or completed

**Previous week's goals and accomplishments**

- Kat Sattel
  - Researched 4 primary sources to help define design constraints and impact (criteria 2b and 4b)
  - Created and organized team notebook
- Therese Kalt
  - Researched 4 primary sources focusing on the global impact of stroke and stroke treatment
  - Contacted the client to plan first client meeting and advisor to set client meeting time
- Noor Awad
  - Researched 4 primary sources based on library lecture
  - Organized personal notebook and google drive
- Freyja Heggeland
  - Researched 4 different primary sources and learned previous work development by other groups that have worked on this project
  - Started writing the product design statement and organized group meetings.

**Activities**

Name	Date	Activity	Time (h)	Week Total (h)	Sem. Total (h)
Kat Sattel	1/28/2026	- Research primary sources	2	2	2
Therese Kalt	1/23/2026 1/27/2026	- Contacted client and advisor - Researched 4 primary resource articles regarding global impact	3	3	3
Noor Awad	1/29/26	- Researched primary sources based on library lecture focusing on need for the project	2	2	2
Freyja Heggeland	1/23/2026  1/27/2026	- Researching dynamic ranges and learning about previous iterations of the project. - Researched primary sources on post-stroke therapies	1  3	4	4