

Title: Gait Trainer with Treadmill (Step Masters) 200/300

Date: 9/5/2025 - 9/11/2025

Client: Amanda Pajerski

Advisor: Dr. Ashton

Team:

Grace Neuville, Leader, geneuville@wisc.edu

Sierra Loosen, BSAC, sloosen@wisc.edu

Julia Shefchik, Communicator, jshefchik2@wisc.edu

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Katelynn Johnson, BPAG, kajohnson57@wisc.edu

Problem statement

A woman with a significant mobility impairment and seizure disorder requires support while walking due to seizure risk and poor postural strength. She has a pacer gait trainer which has allowed her to resume walking outdoors; however, it is unsafe to use in winter. It is crucial for her to be able to use the gait trainer, otherwise she may suffer from muscle deconditioning and mental health problems from a lack of walking. The solution is to design a device that will allow her to use her gait trainer on a treadmill to give her the opportunity to walk long distances while being stuck inside. The device will need to wheel the gait trainer onto the treadmill and then lock/secure the wheels in position so it can't fall off the side while she's walking. It will need to be easy for staff to use, lightweight, and be able to fold up as to not take up too much floor space when not in use.

Brief status update

The team is doing preliminary research to understand more about the project. This includes research on gait trainers, materials, standards for ramps and treadmills. The first client meeting has been scheduled and will allow the team to have more information about the product specifications.

Difficulties / advice requests

NA

Current design

NA

Materials and expenses

Item	Description	Manufac-turer	Mft Pt#	Vendor	Vendor Cat#	Date	#	Cost Each	Total	Link
Category 1										
									\$0.00	
									\$0.00	
Category 2										
									\$0.00	
									\$0.00	
								TOTAL:	\$0.00	

Major team goals for the next week

1. As a team, discuss what was found during individual research
2. Use information from the first client meeting to begin working on PDS
3. Meet with the patient's family to discuss further specifications for the project

Next week's individual goals

- Grace
 - Continue preliminary research on materials
 - Begin working on PDS
 - Begin brainstorming ideas
 - Research different attachment methods that are not c clamps
- Sierra
 - Continue preliminary research
 - Begin working on PDS
- Julia
 - Research the project
 - Come up with questions for the client
 - Work on the PDS document
- Sara
 - Analyze the past project process & aspects that we can improve
 - Research similar items which exist
 - Research the importance of gait trainers
 - Begin working on PDS
- Katelynn
 - Continue preliminary research on current gait trainer/treadmill designs
 - Begin working on PDS

Timeline

Task	Sept				Oct						Nov				Dec	
	11	12	19	26	3	8	10	17	24	31	7	21	20	28	5	10
Project R&D																
Empathize	X															
Background...	X															
Prototyping																
Testings																
Deliverables																
Progress Reports	X															
PDS																
Design Matrix																
Prelim Presentation																
Prelim Deliverables																
Show and Tell																
Final Poster																
Final Deliverables																
Meetings																
Client	X															
Advisor	X															
Website																
Update	X															

Filled boxes = projected timeline

X = task was worked on or completed

Previous week's goals and accomplishments

NA

Activities

Name	Date	Activity	Time (h)	Week Total (h)	Sem. Total (h)
Grace Neuville	9/7/2025	Wrote problem statement	0.5	2	2
	9/7/2025	Researched ramp standards	0.5		
	9/7/2025	Worked on timeline	0.5		
	9/8/2025	Researched portable ramp designs	0.5		

Name	Date	Activity	Time (h)	Week Total (h)	Sem. Total (h)
Sierra Loosen	9/8/2025	Brainstormed questions for client meeting	0.5	1	1
	9/8/2025	Researched ADA compliant ramp dimensions	0.5		

Name	Date	Activity	Time (h)	Week Total (h)	Sem. Total (h)
Julia Shefchik	9/8/2025	Wrote questions for client meeting	0.5	1	1
	9/8/2025	Reviewed given information on pacer gait trainer and treadmill to answer client questions	0.5		
	9/11/2025	Researched material options	.5		

Name	Date	Activity	Time (h)	Week Total (h)	Sem. Total (h)
Sara Mlodik	9/9/2025	Brainstormed/looked over client meeting questions and progress report	.5	1.5	1.5
	9/11/2025	Analyze the 2024 project process in the team notebook and find areas for improvement (about ½ analyzed so far)	1		

Name	Date	Activity	Time (h)	Week Total (h)	Sem. Total (h)
Katelynn Johnson	9/9/2025	Brainstormed questions for client meetings.	0.5	1.5	1.5
	9/9/2025	Reviewed previous group's final report and client comments.	0.5		
	9/10/2025	Reviewed BPAG resources and funding options.	0.5		