

ISWP Curriculum Integration Dalhousie University and University of Manitoba

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1. Halifax, Nova Scotia, Canada
2. Winnipeg, Manitoba, Canada



Locations





2017 – 50 Students



2017 – 68 Students

Dalhousie University
MSc (OT) Program (Masters entry-to-practice) **Year 2**

Course Name and Content	Delivery	Evaluation
<p>Enabling: <i>Wheelchair Provision</i> Assessment and Rx of temporary manual wheelchair</p>	<p>Lecture: 8-Step Structure- mix of western and less-resourced country examples</p> <ul style="list-style-type: none"> • 3 hours 	<p>Written exam</p>
<p>Enabling: <i>Wheelchair Provision</i> Physical ax to funding</p>	<p>Lab: hands-on with simulation and one case study</p> <ul style="list-style-type: none"> • 3 hours 	<p>Written exam</p>
<p>Wellness and Inclusion: Introduction to seating and mobility solutions and training</p>	<p>Lecture: largely videos of users to express options and importance of component selection and wheelchair skills training</p> <ul style="list-style-type: none"> • 2 hours 	<p>Written exam</p>

Dalhousie University
MSc (OT) Program (Masters entry-to-practice) **Year 2**

Course Name and Content	Delivery	Evaluation
Wellness and Inclusion: Wheelchair Skills Training	Bootcamp: interactive lab with 6 skill stations following progression <ul style="list-style-type: none"> • 1.5 hours 	Written exam and IPE
Wellness and Inclusion: Interprofessional Education	Lab: reciprocal training with SLP students 4 wheelchair items <ul style="list-style-type: none"> • 1.5 hours 	Reflection Paper
Mobility Day: Introduction to mobility devices and support surfaces	Expo: manufacturing representatives bring in equipment and users and make brief presentations <ul style="list-style-type: none"> • ~3 hours 	NA

WHO Service-Delivery Model

1. Referral and appointment
2. Assessment
3. Prescription
4. Funding and ordering
5. Product preparation
6. Fitting
7. User training
8. Follow-up, maintenance and repairs

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Provincial Assessment



Provincial Seating and Mobility Assessment

World Health Organization – Wheelchair Service Provision Steps¹

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> 1. Referral and Appointment | <input type="checkbox"/> 3. Prescription | <input type="checkbox"/> 5. Wheelchair Preparation | <input type="checkbox"/> 7. Training |
| <input checked="" type="checkbox"/> 2. Assessment | <input checked="" type="checkbox"/> 4. Funding & Ordering | <input type="checkbox"/> 6. Fitting | <input type="checkbox"/> 8. Maintenance & Follow-up |

Assessment Date (yyyy/mm/dd): _____

Informed consent for assessment and treatment received from client or substitute decision maker, Photos and The release of wheelchair assessment form and prescription to members of circle of care
 Health Record Reviewed: YES NO Collateral History Obtained: YES NO

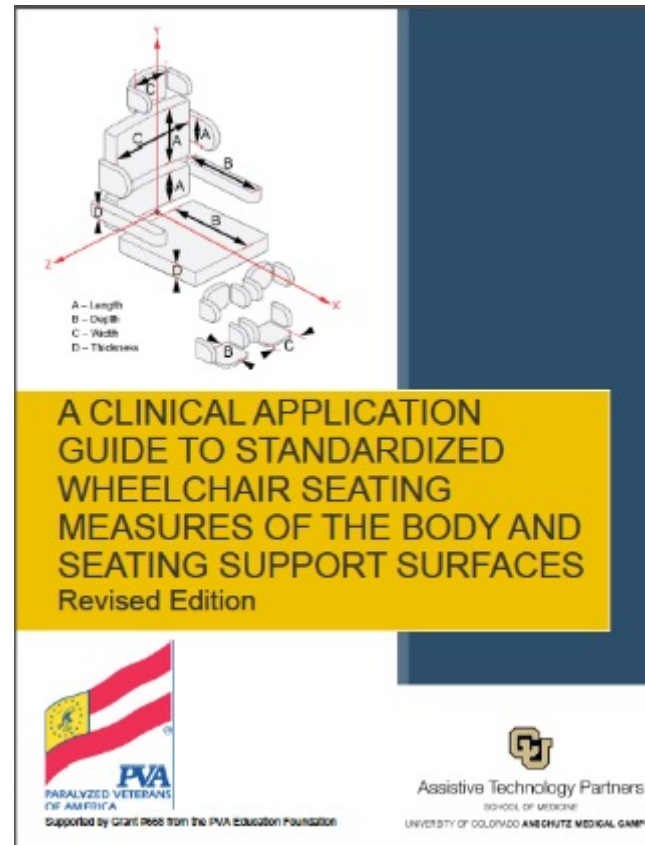
Individual(s) Present for Assessment: _____

Referral Source: _____

Diagnosis/Relevant Medical History: _____

Meaningful Activities: _____

Standardized Language



<http://www.ucdenver.edu/academics/colleges/medicalschool/programs/atp/Resources/WheelchairGuide/Pages/confirmation.aspx>

Standardized Language

HCN: _____

Wheelchair Mobility (cont'd):	
Primary Device	Primary Support Surfaces:
	Back Support:
	Seat Support:
	Dimensions: "w x "l
	Dimensions: "w x "d
	Lower Leg Support:
	Foot Support:
	Arm Support:
	Secondary Support Surfaces:
	Head Support:
	Other Supports:
	System strengths/challenges:
<p>Wheelchair Skills (including safety):</p> <p> <input type="checkbox"/> Independent Indoor <input type="checkbox"/> Independent Community <input type="checkbox"/> Independent Advanced <input type="checkbox"/> Training required <input type="checkbox"/> No training required </p>	

Funding

PHOTOCOPY THEN ATTACH THIS PAGE TO APPLICATION

World Health Organization – Wheelchair Service Provision Steps¹

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> 1. Referral and Appointment | <input checked="" type="checkbox"/> 3. Prescription | <input type="checkbox"/> 5. Wheelchair Preparation | <input type="checkbox"/> 7. Training |
| <input type="checkbox"/> 2. Assessment | <input checked="" type="checkbox"/> 4. Funding & Ordering | <input type="checkbox"/> 6. Fitting | <input type="checkbox"/> 8. Maintenance & Follow-up |

Wheelchair Equipment Prescription		Rationale
Base Manual <input type="checkbox"/> Folding <input type="checkbox"/> Non-folding Power <input type="checkbox"/> Rear-wheel <input type="checkbox"/> Mid-wheel <input type="checkbox"/> Front-wheel <input type="checkbox"/> Power assist Geriatric Chair <input type="checkbox"/> (SEP program only)	Type: Width: Depth: Seat Surface Height: Client's height: Client's weight:	
Expected duration of equipment use: <input type="checkbox"/> > 3 months <input type="checkbox"/> < 3 months		
Positioning Components <input type="checkbox"/> Tilt <input type="checkbox"/> Manual <input type="checkbox"/> Power <input type="checkbox"/> Other:	Type: Access method:	

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Wheelchair Skills Bootcamp



Bootcamp Outcomes

- High satisfaction, positive perceptions
 - Kirby et al. Proc RESNA 2009
 - Kirby et al. Proc RESNA 2011
- Improved wheelchair-skill abilities
 - Routhier et al, Proc RESNA 2008
- Improved knowledge
 - Kirby RL et al. 4th SCI Conference, Niagara Falls Oct 30, 2010
- All outcomes
 - Kirby et al. Proc RESNA 2014

WHEELCHAIR SKILLS HOME

CONDITIONS OF USE

INTRODUCTION

SPOTTING

TESTING

TRAINING

EQUIPMENT

UPCOMING COURSES

PUBLICATIONS & IMPACT

PICTURES AND VIDEOS

ACCREDITATION

CERTIFICATION

FUNDING

DONATIONS

GAMES

RELATED SITES

CONTACT US

FRANÇAIS

WHEELCHAIR SKILLS PROGRAM



"Low tech, high impact"

This website deals with the Wheelchair Skills Program (WSP). The WSP includes the Wheelchair Skills Test (WST), the questionnaire version of the WST (WST-Q) and the Wheelchair Skills Training Program (WSTP). It is used to assess and train wheelchair users and/or their caregivers and clinicians.



Warning

The wheelchair skills described and illustrated on this website can be dangerous and result in severe injury if attempted without the assistance of trained personnel.



WHO Service-Delivery Model

1. Referral and appointment

2. **Assessment** ← WST

3. Prescription

4. Funding and ordering

5. Product preparation

6. Fitting

7. **User training** ← WSTP

8. Follow-up, maintenance and repairs

WHO Service-Delivery Model

1. Referral and appointment

2. Assessment



WST

3. Prescription

4. Funding and ordering

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7. User training

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Versions of WSP by Type of Wheelchair and Nature of the Subject

Type of Wheelchair	Type of Subject
Manual	Wheelchair user
	Caregiver
Powered	Wheelchair user
	Caregiver
 Scooter	Scooter user

WST 4.3 Capacity Scores

Score	Score	What this means
Pass	2	Task independently and safely accomplished without any difficulty
Pass with difficulty	1	Evaluation criteria met, but the subject experienced some difficulty worthy of note (e.g. excessive time or effort, inefficient method, minor injury)
Fail	0	Evaluation criteria not met
Not possible	NP	The wheelchair does not have this part

WHEELCHAIR SKILLS HOME

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Wheelchair Related Publications

by the Dalhousie University Wheelchair Research Team

Wheelchair Skills Publications



60 papers*

Wheelchair Skills Test



[View Selected Articles in PubMed About Wheelchair Skills Testing](#)



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Wheelchair Skills Training Program



[View Selected Articles in PubMed About Wheelchair Skills Training Programs](#)



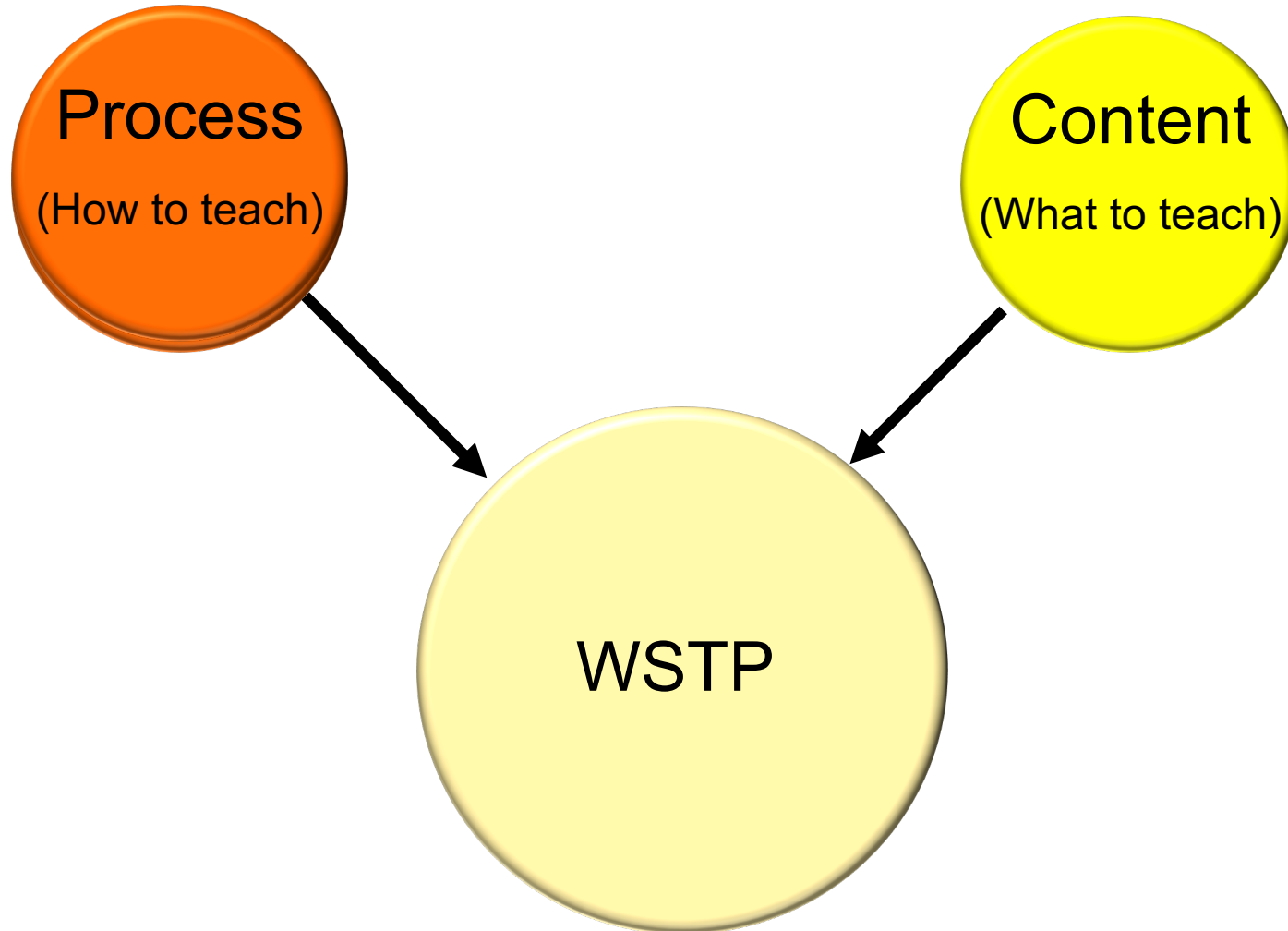
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* Aug 28, 2017

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7. User training ← WSTP
8. Follow-up, maintenance and repairs

Wheelchair Skills Training Program



Motor Learning Principles



- Assessment of wheelchair skills
- Set achievable goals
- Individualize the training process
- Structure of training
- Training in pairs or groups
- Motivation
- Demonstration
- Verbal instructions
- Focus of attention
- Imagery
- Feedback
- Feedback content
- Timing of feedback
- Specificity of practice
- Amount of practice
- Facilitate retention
- Variability of practice
- Distribution of practice
- Whole versus part practice
- Simplification and progression

Content
(What to teach)

Example of Training Tip: Wheelie



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Wheelchair Skills Publications



Wheelchair Skills Test



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Wheelchair Skills Training Program



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24 papers*

*Aug 28, 2017

Integration into Formal Education of Health-Care Students

- Occupational Therapy
- Physiotherapy
- Nursing
- Recreational Therapy (Dalhousie and NSCC)
- Health Science
 - (Diagnostic Cytology, Diagnostic Medical Ultrasound, Nuclear Medicine Technology, Radiological Technology, Respiratory Therapy, Medical Laboratory Technology)
- PM&R

Example: OT Schedule

Time Schedule for OT Wheelchair Skill Training Workshop

	Reception Area Safety and <u>Roho</u> calibration	Station #1 Level surfaces, turns & door	Station #2 Inclines & cross slope	Station #3 Popping Skills	Station #4 Wheelie	Station #5 CG curb & (un)fold
Faculty	Nelson	Emily	Gayle	Kerry	Jonathan	Heidi
Time						
8:30	Group 1a					
8:45	Group 1b	Group 1a				
9:00	Group 2a	Group 1b	Group 1a			
9:15	Group 2b	Group 2a	Group 1b	Group 1a		
9:30	Group 3a	Group 2b	Group 2a	Group 1b	Group 1a	
9:45	Group 3b	Group 3a	Group 2b	Group 2a	Group 1b	Group 1a
10:00	BREAK	Group 3b	Group 3a	Group 2b	Group 2a	Group 1b
10:15	Group 4a	BREAK	Group 3b	Group 3a	Group 2b	Group 2a
10:30	Group 4b	Group 4a	BREAK	Group 3b	Group 3a	Group 2b
10:45	Group 5a	Group 4b	Group 4a	BREAK	Group 3b	Group 3a
11:00	Group 5b	Group 5a	Group 4b	Group 4a	BREAK	Group 3b
11:15	Group 6a	Group 5b	Group 5a	Group 4b	Group 4a	BREAK
11:30		Group 6a	Group 5b	Group 5a	Group 4b	Group 4a
11:45			Group 6a	Group 5b	Group 5a	Group 4b
12:00				Group 6a	Group 5b	Group 5a
12:15					Group 6a	Group 5b
12:30						Group 6a
12:45						

Capacity Building

	Reception Area	Station #1 Level surfaces, turns & door	Station #2 Inclines & cross slope	Station #3 Popping Skills	Station #4 Wheelie	Station #5 CG curb & (un)fold
Faculty	??	??	??	??	??	??
Time						
8:30	Group 1					
8:45	Group 2	Group 1				
9:00	Group 3	Group 2	Group 1			
9:15	Group 4	Group 3	Group 2	Group 1		
9:30	Group 5	Group 4	Group 3	Group 2	Group 1	
9:45	Group 6	Group 5	Group 4	Group 3	Group 2	Group 1
10:00	BREAK	Group 6	Group 5	Group 4	Group 3	Group 2
10:15	Group 7	BREAK	Group 6	Group 5	Group 4	Group 3
10:30	Group 8	Group 7	BREAK	Group 6	Group 5	Group 4
10:45	Group 9	Group 8	Group 7	BREAK	Group 6	Group 5
11:00	Group 10	Group 9	Group 8	Group 7	BREAK	Group 6
11:15	Group 11	Group 10	Group 9	Group 8	Group 7	BREAK
11:30		Group 11	Group 10	Group 9	Group 8	Group 7
11:45			Group 11	Group 10	Group 9	Group 8
12:00				Group 11	Group 10	Group 9
12:15					Group 11	Group 10
12:30						Group 11
12:45						

Blue indicates Rehab staff will help demonstrate and train faculty

Questions?



Questions?

