



Prosthetics/Orthotics 725A - Upper/Lower-Limb Prosthetics and Orthotics for Physicians, Surgeons, and Therapists: April 21-24, 2025

Venue: Northwestern University Prosthetics - Orthotics Center
680 N Lake Shore Drive, Suite 1100 – Chicago, IL 60611

Agenda

<u>Monday, April 21st</u>		Room 1105
8:30-8:45	Orientation	Mr. Robinson
8:45-10:30	Principles of Amputation Surgery	Dr. Ertl
10:30-10:45	<i>Break</i>	
10:45-11:45	Overview: Post-Operative Physical Therapy for the Patient with Lower-Limb Amputation	Dr. Hagopian
11:45-12:45	<i>Lunch</i>	
12:45-2:00	Normal Human Locomotion	Dr. Gard
2:00 – 2:15	<i>Break</i>	
2:15 – 2:45	Post-Operative Prosthetics for the Patient with Lower Limb Amputation	Mr.
Robinson		
2:45 – 3:45	Prosthetic Feet	Mr. Hasso
3:45 – 4:00	<i>Break</i>	
4:00 - 4:45	Principles of the Partial Foot and Symes Protheses	Mr. Robinson
<u>Tuesday, April 22nd</u>		Room 1105
8:30-9:45	Transtibial Prosthetic Care, Biomechanics and Prescription	Mr. Hasso
9:45-10:00	<i>Break</i>	
10:00-11:15	Transfemoral and Proximal Lower Limb Prosthetic Care, Biomechanics and Prescription	Ms. Beattie
11:15-12:00	Transfemoral and Transtibial Case Presentation	Mr. Hasso / Ms. Beattie
12:00-1:00	<i>Lunch</i>	
1:00-1:30	Post-Operative Occupational Therapy for the Patient with Upper Limb Amputation	Dr. Turner
1:30-2:30	Upper Limb Protheses and Harnessing Principles	Mr. Socie
2:30-2:45	<i>Break</i>	
2:45-3:30	Externally Powered Protheses	Mr. Socie
3:30-4:15	Occupational Therapy with an Upper Limb Prothesis	Dr. Turner
4:15-5:00	Case Presentations: Upper Limb Prosthetic Management	Dr. Turner / Mr. Socie
<u>Wednesday, April 23</u>		Room 1105

DRAFT: The Speakers and Activity Sequence are Subject to Change

8:30-9:30	Prosthetic Management of the Medically Complex Amputee	Dr. Reger
9:30-9:45	<i>Break</i>	
9:45-10:45	Common Foot Disorders and Pedorthic Recommendation	Mr. Robinson
10:45-11:00	<i>Break</i>	
11:00-12:30	Lower Limb Orthotics Systems, Biomechanics and Recommendation: AFO	Mr. Robinson
12:30-1:30	Lunch	
1:30-2:15	Case Presentation and Review: AFO	Mr.
Robinson		
2:15-2:30	<i>Break</i>	
2:30-4:00	Lower Limb Orthotics Systems, Biomechanics and Recommendation: KAFO	Mr. Cavanaugh
4:00-4:15	<i>Break</i>	
4:15-5:00	Case Presentation and Review: KAFO	Mr. Cavanaugh

Thursday, April 24

Room 1105

8:30-10:00	Spinal Deformities: Classification and Management	Dr. Bovid
10:00-10:15	<i>Break</i>	
10:15-11:15	Orthotic Management of Scoliosis Recommendation	Mr. Speers
11:15-12:00	Spinal Orthotic Systems for the Treatment of Fractures and Discogenic Pathologies	Mr. Brinkmann
12:00-12:15	Closing Remark	
12:15	<i>Dismiss</i>	

Contact Hours: 23.75



Learning Outcomes

At the conclusion of the course, the learner will:

1. Demonstrate a fundamental understanding of the contemporary rehabilitation care and services that the team provides to patients who require prosthetic and/or orthotic intervention.
2. Demonstrate a fundamental knowledge of common levels of amputation and the etiology associated with upper and lower limb amputations.
3. Identify the role that the physical and occupational therapist plays in the post-operative and sub-acute management of the patient with amputation.
4. Demonstrate the ability to develop a detailed upper and/or lower limb prosthetic prescription based upon contemporary evidence, clinical exam findings and patient values/preferences.
5. Identify atypical clinical presentations and criteria for referral to other health care specialists when presented.
6. Describe the biomechanics of normal human locomotion using static and dynamic models of gait.
7. Identify atypical gait patterns commonly seen within the neuromuscular and orthopedic patient populations.
8. Recognize patients' common clinical presentations that can benefit from upper, lower and/or spinal orthotic management.
9. Demonstrate the ability to develop a detailed lower limb orthotic prescription based upon contemporary evidence, clinical exam findings and patient values/preferences.
10. Understand the etiology and biomechanics associated with common deformities of the spine, including scoliosis and kyphosis.
11. Demonstrate an understanding of treatment protocols tied to the management of persons with spinal deformity, acute injury and/or post-operative needs.
12. Demonstrate the ability to develop a detailed lower limb orthotic prescription based upon contemporary evidence, clinical exam findings and patient values/preferences.



Prosthetics/Orthotics 725A - Upper/Lower-Limb Prosthetics and Orthotics for Physicians, Surgeons and Therapists: April 26-29, 2022

Contributing Faculty

Karen Bovid, M.D. Orthopedic Surgeon, Assistant Professor, Surgery, Western Michigan University-Stryker School of Medicine, Kalamazoo, MI

John Brinkmann, M.A., C.P.O., FAAOP(D) Associate Professor in Physical Medicine and Rehabilitation, Northwestern University Feinberg School of Medicine, Chicago, IL.

Michael Cavanaugh, M.S., C.P.O. Assistant Professor in Physical Medicine and Rehabilitation, Northwestern University Feinberg School of Medicine, Chicago, IL. Clinical Prosthetist / Orthotist, Shirley Ryan Ability Lab, Chicago, IL.

Christian Ertl, M.D. Orthopedic Surgeon, Associate Professor, Surgery, Western Michigan University-Stryker School of Medicine, Kalamazoo, MI

Steven Gard, Ph.D. Associate Professor in Physical Medicine and Rehabilitation and Engineering, Northwestern University Feinberg School of Medicine, Chicago, IL. Investigator and Researcher, US Department of Veterans Affairs, Chicago, IL.

Kavork Hagopian, P.T., D.P.T., M.B.A. Assistant Professor in Physical Therapy, Rosalind Franklin University, North Chicago, IL.

Dan Hasso, C.P.O. Lecturer in Physical Medicine and Rehabilitation, Northwestern University Feinberg School of Medicine, Chicago, IL.

Amy Lawrence, P.T.A., M.S.P.O., C.P.O. Instructor in Physical Medicine and Rehabilitation, Northwestern University Feinberg School of Medicine, Chicago, IL.

Christopher Reger, M.D. Assistant Professor in Physical Medicine and Rehabilitation, Northwestern University Feinberg School of Medicine, Chicago, IL. Associate Resident Program Director and Attending Physiatrist, Shirley Ryan Ability Lab, Chicago, IL.

Chris Robinson, M.S., M.B.A., C.P.O., A.T.C., FAAOP(D) Adjunct Assistant Professor in Physical Medicine and Rehabilitation, Northwestern University Feinberg School of Medicine, Chicago, IL. Clinical Resource Director, National Commission on Orthotic & Prosthetic Education, Alexandria, VA.

Michael Socie, M.S.P.O., C.P.O. Clinical Prosthetist-Orthotist, Shirley Ryan Ability Lab, Chicago, IL.

David Speers, C.P.O. Lecturer in Physical Medicine and Rehabilitation, Northwestern University Feinberg School of Medicine, Chicago, IL.

Kristi Turner, D.H.S., O.T.R/L. Research Occupational Therapist, Center for Bionic Medicine at the Shirley Ryan Ability Lab, Chicago, IL.

Jason Wening, M.S., C.P.O. Central Zone Coordinator at Hanger Clinic, Austin, TX.