

ONLINE COURSE SYLLABI

PART C – MDT: ADVANCED LUMBAR SPINE & LOWER EXTREMITIES

COURSE DESCRIPTION, GOALS AND OBJECTIVES

MDT ONLINE COURSE DESCRIPTION: TEACHING METHODS AND LEARNING EXPERIENCES:

The fully online delivery format is designed to provide high quality learning and while there is the flexibility of considerable work that can be managed on your time, **IT IS A FULLY PARTICIPATORY COURSE WITH MANDATORY WORK** that includes:

- Asynchronous learning activities on your own time; and
- Synchronous live ZOOM sessions on Fridays from 3:00pm-7:00pmEST

Each course is taught by two experienced faculty. We utilize the online learning platform, Schoology, for viewing asynchronous video podcasts, quizzes or learning activities, discussion board for Q&A with faculty and receiving feedback on posts both individually and to the group. Patient evaluations, group work on procedures and individual critique of procedures will also be managed in the Synchronous sessions.

PLEASE NOTE: Deadlines for assignments are established to keep work on track and active participation in all online activity will be monitored for completion. The three synchronous sessions are mandatory and all work **must be evidenced to be eligible to receive a certificate of completion for the course.**

COURSE FEES: \$690 (audits not applicable at this time)

CEUs: All standard courses have been approved as <u>detailed on our website</u>. You will be issued a course completion certificate upon successful completion of the entirety of the course. This online version of the Part C course meets the full 28 hours.

OUTLINE OF ONLINE COURSE CONTENT: <u>Use a current calendar to map out your specific course dates</u>. The dates of your 3 Live Synchronous Sessions can be found on our website in the Course List Location: <u>Online**</u> detail; (See Calendar EXAMPLE on page 2)

Week 1: This course officially begins with a Synchronous Session.

Preliminary Tasks: Upload Personal Introduction video and post any questions for the Sync Session #1

Friday – Synchronous Session #1: Modules 1-3

Asynchronous assignments: Modules 5, 7-9 Podcasts, self-guided, reflective learning activities & discussion board

Week 2:

Asynchronous assignments: Modules 10-13 Podcasts, self-guided, reflective learning activities & discussion board Friday – Synchronous Session #2 Extremity Workshop

Week 3:

Asynchronous assignments: Modules 6, 14 Case Study Podcasts & discussion board Q&A Friday – Synchronous Session #3: Module 4 Procedures, Individualized Technique Critique

EVALUATION OF STUDENT LEARNING

Although formal grades will not be given for the course, participation and active engagement of the student throughout all components of the Online Course will be required in order to earn continuing education credits (CEUs) and a Certificate of Completion.

Student engagement online will be monitored by the faculty member(s), but it remains the responsibility of the student to meet course expectations by particular due dates. Specifically, this will involve:

- Attendance and active participation in all three (3) Synchronous Sessions.
- Completion of learning activities based on module podcasts and posts to the discussion board.

Note: Faculty will pose questions to groups or individuals on the discussion board and during synchronous sessions, making it imperative for the students to complete all assignments and learning activities prior to the due dates found on the course calendar posted in Schoology at the top of the Event listings.

REQUIRED TEXT: Part C Course Manual

The complete course manual will be provided digitally with two access points: 1) in the Schoology Resources section and 2) in your online Profile/Course History section when you log in to the MIUSA website.

Students are encouraged to download one of the following apps to allow for note taking, highlighting, etc. within the secure course manual PDF document:

- Notability (Apple)
- PDF Annotator
- Microsoft One Note
- PDF Element
- Draw Board

^{**} Note: Additional fees may apply to app downloads.



SCHOOLOGY

https://www.schoology.com

Instructions to access and navigate Schoology will be provided with confirmation details of your course registration. You will be given an ACCESS CODE. Be sure to have this available when you first visit Schoology to create your login. The basics you will need –

- Strong Wi-fi/Internet connectivity
- Up-to-date Web Browser with Javascript and Cookies enabled
- A Webcam and microphone (for synchronous sessions)
- To review all specific technology requirements, visit: https://support.schoology.com/hc/en-us/articles/201002153-System-Requirements

ZOOM

https://www.zoom.us/

We will use Zoom for the Synchronous sessions. <u>Download the Zoom app or appropriate plugin</u> to your PC or device you plan to use for the Sync sessions. Links to Join and passwords for each Sync session will be posted in the Schoology Materials and Calendar.

IMPORTANT TO NOTE: <u>You will be required to have your webcam on at all times in Zoom sessions</u>. Please be considerate of your attire; dress as you would for an in-person course and minimize distractions i.e., pets, children, etc.

PROFESSIONALISM

Professionalism is an expectation of the online courses. Netiquette is the correct or acceptable way of communicating on the internet. Examples of netiquette include but are not limited to the following:

- Appropriate use of language and tone
- Expectation of proper grammar, punctuation, text fonts and colors
- Respect and consideration for other students
- Avoidance of sarcasm and posting of jokes
- Maintainance of privacy and information sharing (when appropriate)

COURSE CALENDAR EXAMPLE: REVIEW YOUR COURSE SPECIFIC DATES & TIMES of the 3 Live Sync Sessions on our website in the Course List - Location: Online** detail; and use a current calendar to map out your specific course dates. The course calendar can also be accessed in Schoology by selecting the calendar icon beside 'Upcoming' at the top of the Event listing menu on the right. Upcoming · To you will be able to export the Schoology calendar into other calendars i.e., Outlook to help keep track of assignment due dates.

These are the due dates (deadlines) for assignments.

2023	February		2023C301	Module Assignments by midnight on days ALL TIMES ARE "EDT":	listed below.	PART C
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
29	30	31	01	02	03	04
Participants receive email with Schoology access code & tutorial one week before start date. Course begins with a live Sync Session.		Procedure Video access & Podcasts Modules 5, 7- 9 available as of course Start Date.	Personal Introductions Questions for Sync #1: Submit by midnight Thursday ⇒	Course Official Start Date Friday February 3 ⇒	SYNC #1: 3pm-7pmEDT Modules 1, 2, 3	
05	06	07	08	09	10	11
Module 5 Due: Diff Diagnosis Subgroup OTHER SI Joint		Module 7 & 8 Due: EXT: Epidemiology Characteristics of MDT Syndrome	(Podcasts 10-13 published@5:00am)		Module 9 Due: Assessment	
12	13	14	15	16	17	18
Module 10 Due: Derangement - Hip, Knee, Ankle		Module 11 Due: Dysfunction - Articular & Contractile	(Podcasts 6, 14 published@5:00am)	Module 12-13 Due: Postural Subgroups OTHER	SYNC #2: 3pm-7pmEDT Modules 5-13	
19	20	21	22	23	24	25
Module 6 Due: Case Studies - Lumbar				Module 14 Due: Case Studies - Extremities	SYNC #3: 3pm-7pmEDT Module 4 Procedures Patient evals	-
		COURSE EVALUATIO	N FORM DUE BY MID	NIGHT SUNDAY, 2/26		

28 hours

This course officially begins with a Synchronous Session

Review your specific course 3 live Sync Sessions dates on our website in the Course			se List Location: Online** detail		
MODULES	Delivery	# Minutes	<u>TOPICS</u>		
WEEK ONE					
ADVANCED SPINE					
Module 1			Problem Areas and Problem Solving		
Module 2	SYNC #1	240	Assessment and Differentiation		
Module 3			Management of the MDT Syndromes		
Post-Session Quiz		30	,		
Friday 3:00pm-7:00pm EST					
Module 5	Async		Differential Diagnosis and Subgroups of OTHER		
podcast 1		30	OTHER		
podcast 2		30	Differentiation of MUR, ANR, Stenosis, Derangement		
podcast 3 / Case Study	•	60	SI Joint		
discussion posts/quizzes		60			
EXTREMITIES					
Module 7	Async		Epidemiology / Evidence Base for the Lower Extremity		
podcast 1		30			
discussion posts/quizzes		30	EXPOSS Study Quiz		
Module 8	Async		Characteristics of the MDT Syndromes		
podcast 1		30	Part 1		
podcast 2		30	Part 2		
discussion posts/quizzes		60			
Module 9	Async	45	Assessment		
podcast 1		45 45			
discussion posts/quizzes WEEK TWO		45			
Module 10	Async		Derangement Syndrome		
podcast 1	•	30	Hip		
podcast 1		30	Knee		
podcast 2		30	Ankle		
discussion posts/quizzes		60	THRE		
Module 11	Async		Dysfunction Syndrome		
podcast 1	•	45	Articular and Contractile		
discussion posts/quizzes		60			
Module 12 + 13	Async		Postural Syndrome and Subgroups of OTHER		
podcast 1	•	30	0p		
discussion posts/quizzes		15			
Extremity Workshop					
Friday 3:00pm-7:00pm EST	SYNC #2	240	General overview/questions Modules 7-14;		
			Faculty role plays, technique demo, learning activities		
WEEK THREE					
Module 6	Async		Case Studies: Lumbar Spine		
Podcasts		60			
discussion posts/quizzes		30			
Module 14	Async		Case Studies: Extremities		
Podcasts		60			
discussion posts/quizzes	;	30			
Module 4					
Friday 3:00pm-7:00pm EST	SYNC #3	60	Patient Evaluations		
Demonstration, Practical		180	Procedures		
		22			
TOI	TAL ONLINE hours	s: 2 8			



COURSE GOALS

As its name implies, this course focuses on advanced Mechanical Diagnosis and Therapy for the lumbar spine and an introduction to the application of Mechanical Diagnosis and Therapy for the lower extremities. The goals of this course are that you build on the knowledge and skills that you gained from the MDT Part A by improving your clinical reasoning, enhancing your patient management skills and expanding your knowledge base to include the extremities.

Following attentive participation and completion this course will provide participants with the knowledge, skills and abilities to:

Lumbar Spine

- 1. Identify, analyse and discuss common problems encountered in the application of Mechanical Diagnosis and Therapy for the lumbar spine.
- 2. Analyse and discuss the MDT assessment in a biopsychosocial framework and explore how it is used to differentially diagnose and determine classification.
- 3. Analyse and discuss the MDT management principles of Derangement, Dysfunction and Postural Syndrome with focus on reassessment, the progression of forces, recovery of function and prophylaxis.
- 4. Perform MDT procedures for the lumbar spine at an advanced level and be able to identify and analyse problems with their application.
- 5. Recognise the criteria of the subgroups of OTHER and understand how to differentiate from the Syndromes
- 6. Analyse and discuss case studies of patients presenting with lumbar spine symptoms to differentiate and determine classification and management.

Lower Extremities

- 1. Describe the major epidemiological factors associated with lower extremity conditions.
- 2. Describe and discuss the current evidence base for the use of MDT for lower extremity musculoskeletal disorders.
- 3. Describe and differentiate the characteristics of Derangement, Dysfunction and Postural Syndromes as they present in the lower extremity.
- 4. Perform a spinal assessment and analyse the findings to differentiate between symptoms that are lumbar spine in origin or are arising from lower extremity structures
- 5. Perform and analyse MDT assessments for lower extremity musculoskeletal disorders and determine the presence of McKenzie Syndromes.
- 6. Design appropriate management programmes for patients who present with Derangement, Dysfunction and Postural Syndromes.
- 7. Recognise the presentation of the subgroups of OTHER in the lower extremity, and understand the criteria for diagnosis and management options.
- 8. Analyse and discuss case studies of patients presenting with lower extremity symptoms to differentiate, and to determine classification and management.

→ MODULE ONE

PROBLEM AREAS AND PROBLEM SOLVING

OBJECTIVES

- 1. Identify and discuss the common problems encountered with the McKenzie assessment and classification of patients who present with lumbar spine disorders.
- 2. Identify, analyse and discuss the common problems with the MDT management of patients who present with lumbar spine disorders and use MDT clinical reasoning principles to identify appropriate solutions.
- 3. Compare and contrast individual areas of difficulty with those commonly encountered.



→ MODULE TWO

ASSESSMENT AND DIFFERENTIATION

OBJECTIVES

With sufficient time to/for practice, participants will be able to meet/achieve the following objectives:

- 1. Demonstrate an advanced understanding of the clinical significance of the components of the MDT assessment in a biopsychosocial context.
- 2. Demonstrate an advanced understanding of how the findings of the MDT assessment assist in differentiating between symptoms that are lumbar spine in origin or are arising from lower extremity structures.
- 3. Analyse how the MDT assessment helps to identify precautions and contraindications to mechanical therapy in patients presenting with lumbar spine symptoms.
- 4. Demonstrate competence in using McKenzie terminology when completing a Lumbar Assessment form.
- 5. Analyse a completed McKenzie Lumbar Assessment form to determine the correct McKenzie classification.

→ MODULE THREE

MANAGEMENT OF THE MDT SYNDROMES

OBJECTIVES

With sufficient time to/for practice, participants will be able to meet/achieve the following objectives:

- 1. Compare and contrast the management principles for the 3 syndromes.
- 2. Analyse the role of force progressions and force alternatives and their implementation in the management of patients with MDT.
- 3. Identify the components of the Re-assessment process, analyse and interpret the findings to confirm classification and guide further management
- 4. Summarise the components of Recovery of Function and Prophylaxis and discuss the implementation of these in management.

→ MODULE FOUR

LUMBAR SPINE PROCEDURES

<u>OBJECTIVES</u>

With sufficient time to/for practice, participants will be able to meet/achieve the following objectives:

- 1. Effectively instruct the self-treatment procedures for the lumbar spine, identify difficulties in performance and problem solve as required.
- 2. Effectively perform the clinician procedures for the lumbar spine, analyse and correct errors with performance.
- Understand the indications for the application of each procedure, interpret the response and discuss implications.

→ MODULE FIVE

DIFFERENTIAL DIAGNOSIS AND SUBGROUPS OF OTHER

ORIFCTIVES

- 1. Discuss the criteria of the subgroups of OTHER.
- 2. Analyse the findings of the MDT assessment to differentiate MDT syndromes from subgroups of OTHER.
- 3. Perform the pain provocation tests for the sacro-iliac joint, interpret the results, discuss classification and management
- 4. Discuss the management of each subgroup of OTHER integrating MDT principles.



→ MODULE SIX CASE STUDIES

OBJECTIVES

With sufficient time to/for practice, participants will be able to meet/achieve the following objectives:

- 1. Analyse case studies presented on McKenzie Assessment forms and using MDT clinical reasoning principles determine the presence of Derangement, Dysfunction and Postural Syndrome.
- 2. Analyse case studies presented on McKenzie Assessment forms and using MDT clinical reasoning, differentiate the presence of serious pathology.
- 3. Analyse case studies presented on McKenzie Assessment forms and using MDT clinical reasoning, differentiate the presence of OTHER subgroups.
- 4. Analyse the findings of the assessment forms and using clinical reasoning, design a management plan for the provisional classification.

→ MODULE SEVEN

EPIDEMIOLOGY/EVIDENCE BASE FOR MDT

OBJECTIVES

With sufficient time to/for practice, participants will be able to meet/achieve the following objectives:

- 1. Describe the major epidemiological factors associated with lower extremity conditions.
- 2. Describe the concept of 'natural history' in the resolution of extremity pain.
- 3. Describe and discuss the current evidence on the use of MDT for lower extremity conditions.

→ MODULE EIGHT

CHARACTERISTICS OF THE MDT SYNDROMES

OBJECTIVES

With sufficient time to/for practice, participants will be able to meet/achieve the following objectives:

- 1. Discuss issues relating to the use of a patho-anatomical diagnosis and describe the alternative MDT model of symptomatic and mechanical responses used to identify a mechanical diagnosis.
- 2. Describe and differentiate the characteristics of the three McKenzie Syndromes Derangement, Dysfunction (Articular and Contractile) and Postural in the lower extremity.

→ MODULE NINE ASSESSMENT

OBJECTIVES

- 1. Demonstrate an understanding of the clinical significance of the components of the MDT assessment.
- 2. Analyse how the History and the Physical Examination helps to identify precautions and contraindications to mechanical therapy in patients presenting with lower extremity symptoms.
- 3. Skillfully and accurately complete the History and the Physical Examination of the McKenzie assessment as used for the lower extremity.
- 4. Conduct and evaluate a relevant spinal assessment to exclude symptoms that are spinal in origin as determined by the History and Physical Examination.
- 5. Demonstrate an understanding and the appropriate application of terms used in completing the McKenzie Lower Extremity Assessment form.
- Integrate the results of the History and the Physical Examination including the repeated movement testing to differentiate and determine a provisional classification.



→ MODULE TEN

DERANGEMENT SYNDROME

OBJECTIVES

With sufficient time to/for practice, participants will be able to meet/achieve the following objectives:

- 1. Describe the key clinical features of Derangement that are seen on the McKenzie Lower Extremity Assessment Form.
- 2. Discuss and design appropriate management programmes for patients who present with Derangements in the lower extremity.
- 3. Discuss the concept of progression of forces and the use of force alternatives when treating lower extremity Derangements.
- Analyse and demonstrate a variety of loading strategies for Derangements seen in the lower extremity, and discuss the rationale for their use.

→ MODULE ELEVEN DYSFUNCTION SYNDROME

OBJECTIVES

With sufficient time to/for practice, participants will be able to meet/achieve the following objectives:

- 1. Describe the key clinical features of Articular Dysfunction that are seen on the McKenzie Lower Extremity Assessment form.
- 2. Discuss and design appropriate management programmes for patients who present with an Articular Dysfunction in the lower extremity.
- 3. Describe the key clinical features of Contractile Dysfunction that are seen on the McKenzie Lower Extremity Assessment form.
- 4. Discuss and design appropriate management programmes for patients who present with a Contractile Dysfunction in the lower extremity.
- 5. Analyse and demonstrate a variety of loading strategies for Contractile Dysfunctions seen in the lower extremity and discuss the rationale for their use.

→ MODULE TWELVE POSTURAL SYNDROME

OBJECTIVES

With sufficient time to/for practice, participants will be able to meet/achieve the following objectives:

- Describe the key clinical features of Postural Syndrome that are seen in the McKenzie Lower Extremity Assessment Form.
- 2. Discuss the principles of MDT management of Postural Syndrome when present in the Lower Extremity.

→ MODULE THIRTEEN SUBGROUPS OF OTHER

OBJECTIVES

- 1. Discuss the criteria of the subgroups of OTHER in the Lower Extremities and analyse how the subgroups would present during a MDT assessment.
- 2. Discuss the management of each subgroup by what is currently supported in the literature and analyse how this fits with MDT principles and strategies.



→ MODULE FOURTEEN CASE STUDIES

OBJECTIVES

- 1. Analyse case studies presented on McKenzie Assessment forms and using MDT clinical reasoning principles determine the presence of Derangement, Dysfunction or Postural Syndrome.
- 2. Analyse case studies presented on McKenzie Assessment forms, and using clinical reasoning differentiate the presence of serious pathology.
- 3. Analyse case studies presented on McKenzie Assessment forms, and using clinical reasoning differentiate the presence of OTHER subgroups.
- 4. Analyse the findings of the assessment forms and using MDT clinical reasoning, design a management plan for the provisional classification.