

**ONLINE COURSE SYLLABI**  
**PART D – MDT: ADVANCED CERVICAL & THORACIC SPINE & UPPER EXTREMITIES**  
**COURSE DESCRIPTION, GOALS AND OBJECTIVES**

The fully online course delivery format is designed to provide high quality learning with 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 [detailed on our website](#). You will be issued a course completion certificate upon successful completion of the entirety of the course. This online version of the Part D course meets the full 28 hours.

**OUTLINE OF ONLINE COURSE CONTENT:** Use a current calendar to map out your specific course dates.

**The dates of your 3 Live Synchronous Sessions can be found on our website in the Course List Location: [Online\\*\\*](#) detail; (See Calendar EXAMPLE on page 2)**

<p><b>Week 1:</b> <b><i>This course officially begins Wednesday with Asynchronous Assignments.</i></b>          Preliminary Tasks: Upload Personal Introduction video by Wednesday midnight          Asynchronous assignments: Modules 8-10 Podcasts, self-guided, reflective learning activities, &amp; discussion board</p>
<p><b>Week 2:</b>          Asynchronous work cont.: Modules 11-14 Podcasts, self-guided, reflective learning activities &amp; discussion board          Friday 3:00pm-7pmEST – Synchronous Session #1: Module 1 Problem Areas, Extremity Workshop 1, Technique Basics</p>
<p><b>Week 3:</b>          Asynchronous assignments: Modules 2-3,6-7 Podcasts, self-guided, reflective learning activities &amp; discussion board          Friday 3:00pm-7pmEST – Synchronous Session #2: Extremity Workshop 2, Module 4 Procedures</p>
<p><b>Week 4:</b>          Asynchronous assignments: Module 15 Case Studies Podcasts, learning activities &amp; discussion board; Technique video posts and review          Friday 3:00pm-7pmEST – Synchronous Session #3: Module 4 Procedures, Individualized Technique Critique</p>

**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 D 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 \(Apple\)](#)
- [Microsoft One Note](#)
- [Draw Board](#)
- [PDF Annotator](#)
- [PDF Element](#)

**\*\* Note:** *Additional fees may apply to app downloads.*

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**SCHOOLGY**

<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. [Download the Zoom app or appropriate plugin](#) 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: You will be required to have your webcam on at all times in Zoom sessions. 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
- Maintenance 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 Upcoming - [calendar icon] g menu on the right. 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		2023D301	Module Assignments due as noted by midnight on days listed below. ALL TIMES ARE "EDT": EASTERN TIME ZONE		PART D
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 work on your own (Asynchronous). Procedure Video access is available immediately on start date.		Podcasts Modules 8-14 published at midnight in Schoology	<a href="#">Course officially starts today Feb 1</a> Personal Intro videos due by midnight			<a href="#">Module 8:</a> Epidemiology <a href="#">Module 9+10:</a> Characteristics MDT Syndromes /Assessment
05	06	07	08	09	10	11
<a href="#">Module 11:</a> Derangement - shoulder; elbow/wrist		<a href="#">Module 12:</a> Dysfunction -	Podcasts 2,3,6,7 published @ midnight	<a href="#">Module 13 + 14:</a> Postural Subgroups OTHER	<a href="#">SYNC #1: 3pm-7pmEDT</a> Mod 1 Problem Areas Extremity Workshop 1 Review Technique Basics	<a href="#">Module 2:</a> Assmt & Differentiation - Drivers of Pain & Disability
12	13	14	15	16	17	18
<a href="#">Module 3:</a> Management of MDT Syndromes		<a href="#">Module 6:</a> Subgroup OTHER Differentiation, Criteria and Mgmt	Podcasts 15 published; Technique groups assigned	<a href="#">Module 7:</a> Cervicogenic Headaches	<a href="#">SYNC #2: 3pm-7pmEDT</a> Extremity Workshop 2 Module 4 - Faculty live role plays, faculty demo techniques	
19	20	21	22	23	24	25
<a href="#">Module 15:</a> Case Studies		<a href="#">Module 4-Task 1:</a> Student submit one technique video from assigned group for fellow student review		<a href="#">Module 4-Task 2:</a> Student review one in each group of other student videos	<a href="#">SYNC #3: 3pm-7pmEDT</a> Final Q&A Scenarios, demo; students show technique (model needed)	
<b>COURSE EVALUATION FORM DUE BY MIDNIGHT SUNDAY, 2/26</b>						

**28 hours**

*This course officially begins on a Wednesday with Asynchronous Assignments*

Review your specific course 3 live Sync Sessions dates on our website in the Course List Location: Online\*\* detail

<b>MODULES</b>	<b>Delivery</b>	<b># Minutes</b>	<b>TOPICS</b>
<b>WEEK ONE</b>			
<b>EXTREMITIES</b>			
Module 8	<b>Async</b>		Epidemiology / Evidence Base for the Upper Extremity
podcast 1		30	
discussion posts/quizzes		15	
Module 9	<b>Async</b>		Characteristics of the MDT Syndromes
podcast 1		45	
discussion posts/quizzes		45	
Module 10	<b>Async</b>		Assessment
podcast 1		45	
discussion posts/quizzes		45	
<b>WEEK TWO</b>			
Module 11	<b>Async</b>		Derangement Syndrome
podcast 1		30	<i>Shoulder</i>
podcast 2		30	<i>Elbow/Wrist</i>
discussion posts/quizzes		60	
Module 12	<b>Async</b>		Dysfunction Syndrome
podcast 1		30	<i>Articular</i>
podcast 2		30	<i>Contractile</i>
discussion posts/quizzes		60	
Modules 13 + 14	<b>Async</b>		Postural Syndrome and Subgroups of OTHER
podcast 1		30	
discussion posts/quizzes		15	
Extremity Workshop	<b>FRI SYNC #1 3:00-7:00pm EST</b>	240	General Overview/Questions Faculty Role Play, Techniques, Learning Activities Problem Areas and Problem Solving
Module 1			
<b>WEEK THREE</b>			
<b>ADVANCED SPINE</b>			
Module 2	<b>Async</b>		Assessment and Differentiation Drivers of Pain and Disability
podcast 1		45	
discussion posts/quizzes		45	
Module 3	<b>Async</b>		Management of the MDT Syndromes
podcast 1		45	
discussion posts/quizzes		45	
Module 6	<b>Async</b>		Subgroups of OTHER - Criteria and Management <i>Differentiation: MUR, ANR, Stenosis, Derangement</i>
podcast 1		45	
discussion posts/quizzes		45	
<b>WEEK THREE cont.</b>			
Module 7	<b>Async</b>		Cervicogenic Headaches
podcast 1		30	
discussion posts/quizzes		30	
Extremity Workshop	<b>FRI SYNC #2 3:00-7:00pm EST</b>	60	<i>Q&amp;A, Learning Activities</i>
Modules 4+5		60	<i>Role Play, Clinical Reasoning Activities</i>
		120	<i>Procedures</i>
<b>WEEK FOUR</b>			
Module 15	<b>Async</b>		Case Studies: Lumbar Spine Case Studies: Lumbar Spine
Podcasts		60	
discussion posts/quizzes		60	
Modules 4+5	<b>FRI SYNC #3 3:00-7:00pm EST</b>	30	<i>Review / Q &amp; A</i>
		210	<i>Procedures</i>
<b>TOTAL ONLINE hours:</b>		<b>28</b>	

### **COURSE GOALS**

As its name implies, this course focuses on advanced Mechanical Diagnosis and Therapy for the cervical spine and an introduction to the application of Mechanical Diagnosis and Therapy for the upper extremities. The goals of this course are that you build on the knowledge and skills that you gained from the MDT Part B 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:

#### ***Cervical and Thoracic Spine***

1. Identify, analyse and discuss common problems encountered in the application of Mechanical Diagnosis and Therapy for the cervical and thoracic 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 cervical and thoracic spine at an advanced level and to identify and analyse problems with their application.
5. Recognise the criteria of the OTHER subgroups in the cervical and thoracic spine, understand the criteria for diagnosis and explore management options
6. Analyse and differentiate the various causes of headache and discuss how the McKenzie History and Physical Examination assist in determining the presence of cervicogenic headaches.
7. Analyse and discuss case studies of patients presenting with cervical / thoracic symptoms, to differentiate and determine classification management.

#### ***Upper Extremities***

8. Describe the major epidemiological factors associated with upper extremity conditions.
9. Describe and discuss the current evidence base for the use of MDT for upper extremity musculoskeletal disorders.
10. Describe and differentiate the characteristics of Derangement, Dysfunction and Postural Syndromes as they present in the upper extremity
11. Perform and analyse MDT assessments for upper extremity musculoskeletal disorders and determine the presence of McKenzie Syndromes.
12. Design appropriate management programs for patients who present with Derangement, Dysfunction and Postural syndromes.
13. Recognise the presentation of OTHER subgroups in the upper extremity, understand the criteria for diagnosis and explore management options
14. Analyse and discuss case studies of patients presenting with upper extremity symptoms, to differentiate and to determine classification and management

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## **➔ MODULE ONE**

### **PROBLEM AREAS AND PROBLEM SOLVING GUIDE: CERVICAL AND THORACIC SPINE**

#### **OBJECTIVES**

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

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

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➔ **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. Analyse how the History and Physical Examination helps to identify serious spinal pathology in patients presenting with cervical / thoracic spine symptoms.
3. Demonstrate an advanced understanding of how the findings of the History and the Physical Examination sections of the MDT assessment assist in differentiating between symptoms that are cervical or thoracic in origin.
4. Demonstrate an advanced understanding of how the findings of the History and the Physical Examination sections of the MDT assessment assist in differentiating between symptoms that are cervical or thoracic in origin and those that are arising from upper extremity structures.
5. Demonstrate competence in using McKenzie terminology when completing a Cervical or a Thoracic Assessment form.
6. Analyse a completed McKenzie Cervical or Thoracic 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 and OTHER.
2. Analyse the role of force progressions and force alternatives and their implementation in the MDT management of patients.
3. Identify the components of the Reassessment 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**

**CERVICAL SPINE WORKSHOP**

OBJECTIVES

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

1. Demonstrate advanced skill in selecting, performing and teaching the self-treatment procedures for the cervical spine and analyse common problem areas.
2. Perform the clinician procedures for the cervical spine (excluding manipulation) at an advanced level and analyse common problem areas.

➔ **MODULE FIVE**

**THORACIC SPINE WORKSHOP**

OBJECTIVES

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

1. Demonstrate advanced skill in selecting, performing and teaching the self-treatment procedures for the thoracic spine and analyse common problem areas.
2. Perform the clinician procedures for the thoracic spine (excluding manipulation) at an advanced level and analyse common problem areas.

➔ **MODULE SIX**

**SUBGROUPS OF OTHER – DIFFERENTIATION, CRITERIA AND MANAGEMENT**

OBJECTIVES

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

1. Discuss the criteria of the subgroups of OTHER 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 SEVEN**

**CERVICOGENIC HEADACHES**

OBJECTIVES

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

1. Analyse and discuss how the McKenzie History and Physical Examination assists in determining the presence of cervicogenic headaches.
2. Analyse and discuss how the McKenzie History and Physical Examination helps to identify Headaches that may be related to Serious pathologies
3. Demonstrate advanced skill in performing and teaching the self-treatment procedures for the management of cervicogenic headaches.
4. Perform the clinician procedures for the cervical spine (excluding manipulation) that may be required for the management of cervicogenic headaches, at an advanced level and analyse common problem areas.

➔ **MODULE EIGHT**

**EPIDEMIOLOGY / EVIDENCE BASE**

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 upper extremity conditions.
2. Describe and discuss the current evidence on the prevalence of McKenzie syndromes in upper extremity disorders and the reliability of classification.
3. Describe and discuss the current evidence on the management of upper extremity disorders utilising MDT.

➔ **MODULE NINE**

**CHARACTERISTICS OF THE MDT SYNDROMES**

OBJECTIVES

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

1. Describe and differentiate the characteristics of the MDT Syndromes – Derangement, Dysfunction (Articular and Contractile) and Postural in the upper extremity.

➔ **MODULE TEN**

**ASSESSMENT**

OBJECTIVES

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

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

➔ **MODULE ELEVEN**

**DERANGEMENT SYNDROME**

OBJECTIVES

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

1. Describe the key clinical features of Derangement as they are seen in the History and Physical Examination components of the McKenzie Upper Extremity assessment form.
2. Design appropriate management programs for patients who present with Derangements in the upper extremity.
3. Discuss the concept of progression of forces and the use of force alternatives when treating upper extremity Derangements.
4. Analyse and demonstrate a variety of loading strategies for Derangements seen in the lower extremity, and discuss the rationale for their use.

➔ **MODULE TWELVE**

**DYSFUNCTION SYNDROME**

OBJECTIVES

With sufficient time, 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 Upper Extremity Assessment form.
2. Discuss and design appropriate management programs for patients who present with an Articular Dysfunction in the upper extremity.
3. Describe the key clinical features of Contractile Dysfunction that are seen on the McKenzie Upper Extremity Assessment form.
4. Discuss and design appropriate management programs for patients who present with a Contractile Dysfunction in the upper extremity.
5. Analyse and demonstrate a variety of loading strategies for Contractile Dysfunctions seen in the upper extremity and discuss the rationale for their use.

➔ **MODULE THIRTEEN**

**POSTURAL SYNDROME**

OBJECTIVES

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

1. Describe the key clinical features of Postural Syndrome that are seen in the McKenzie Upper Extremity Assessment form.
2. Discuss the principles of MDT management of Postural Syndrome when present in the Upper Extremity.

➔ **MODULE FOURTEEN**

**SUBGROUPS OF OTHER**

OBJECTIVES

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

1. Discuss the criteria of the subgroups of OTHER in the upper 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 FIFTEEN**

**CASE STUDIES**

OBJECTIVES

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

1. Analyse case studies of patients presenting with symptoms in the upper limb and discuss their classification.
2. Compare the assessment findings of the case studies and discuss how these assist with classification.
3. Describe and discuss MDT management strategies for case studies of patients presenting with upper limb symptoms.