

PT626: Management of the Musculoskeletal System I

Fall 2024

Tuesdays and Thursdays: 7:30am-9:30am

COURSE DESCRIPTION:

This course builds upon knowledge of anatomy, physiology, pathology, biomechanics, and therapeutic exercise to enhance the skills of examination, evaluation, and treatment of the human movement system. Emphasis will be given to movement system screening, physical therapy diagnoses, and clinical reasoning resulting in referral and/or modified physical therapy practice.

CAPTE Standards & Elements:

Standard 7: Elements 7A, 7B, 7C, and 7D

DEPARTMENT OFFERING THE COURSE:

UND School of Medicine and Health Sciences - Department of Physical Therapy

CREDIT HOURS: 2 Credit Hours**ABOUT THE PROFESSOR & CONTACT INFORMATION:**

Name: Ricky Morgan, PT, DPT, PhD, OCS, Cert. MDT

Phone: (701) 777-3862

Email: Richard.morgan@und.edu

Office Location: UND-SMHS Suite E321, Room E349

Student Hours: By Appointment

COURSE CONTACT HOURS:

Tuesday: 7:30am-9:30am

Thursday: 7:30am-9:30am

COURSE PREREQUISITES:

Registered in the professional Physical Therapy program.

COURSE OBJECTIVES:

After successfully completing this course, you should be able to:

1. Perform correctly movement system assessments (ADBE and FMS/SFMA) as defined and presented by the textbook and other course materials. (SRE: 7A, 7D1, 7D2, 7D4, 7D10; Blooms Taxonomy: Cognitive: Application, Affective: Responding, Psychomotor: Complex Overt Response, **All: Intermediate**; PGs: 1, 2.)
2. Evaluate and summarize the findings (ADBE and FMS/SFMA), formulate an appropriate treatment plan, and instruct a patient/client in a plan of care leading to the prevention or resolution of movement impairments and dysfunctions. (SRE: 7A, 7B2, 7C1, 7C2, 7C3, 7D1, 7D2, 7D4, 7D10, 7D13, 7D18; Blooms Taxonomy: Cognitive: Synthesis, Psychomotor: Adaptation, Origination, **All: Intermediate to Advanced**; PGs: 1, 2; **Threads**: Critical Inquiry/Clinical Decision Making)
3. Provide constructive (oral and written) feedback to the evaluator (classmate) as to movement instructions, psychomotor techniques, 'patient/client education,' and the plan of care provided during the evaluations and development of the Plan of Care. (SRE: 7B2, 7C2, 7C3, 7D13, 7D18; Blooms Taxonomy: Cognitive: Evaluation, **All: Intermediate to Advanced**; PGs: 1, 2, 5; **Threads**: Critical Inquiry/Clinical Decision Making.)

COURSE SCHEDULE AND OUTLINE OF CONTENT:

- See attached schedule

DESCRIPTION OF TEACHING METHODS AND LEARNING EXPERIENCES:

Teaching methods in this course include lecture, laboratory and small group learning. Written assignments relative to PT examination, evaluation, and interventions. Written and Practical Examinations. The above objectives contribute to the Practice Model Components in the areas of Foundational Sciences, Clinical Sciences and Patient/Client & Practice Management Expectations.

COURSE MODE OF DELIVERY:

- Synchronous, in-person

ATTENDANCE:

Class attendance is expected 100% of the time. Students must first attempt to notify the instructor by phone or in person of any absences. The student must also contact the instructor directly through e-mail or written documentation for any absences.

MAKE-UP WORK/EXAMINATIONS:

If an absence is anticipated, make-up examinations should be completed **prior** to the absence. If an absence is unanticipated, arrangements for make-up examinations must be made **by the student within three days** of the student's return to classes. **Students may be assigned additional coursework for all absences.**

MATERIALS – TEXT, READINGS, & SUPPLEMENTARY READINGS:

Readings include provided course handouts and PowerPoints.

Recommended books include:

- (1) *Movement: Functional Movement Systems, Screening – Assessment – Corrective Strategies* by Gray Cook with Dr. Lee Burton, Dr. Kyle Kiesel, Dr. Greg Rose & Milo F. Bryant (ISBN: 978-1-931046-72-5)
- (2) *Diagnosis and Treatment of Movement Impairment Syndromes* by Shirley A. Sahrmann (ISBN: 978-0-8016-7205-7).

METHODS OF STUDENT EVALUATION:

Movement Systems

Written and Laboratory Assignments: Examinations, evaluations, and interventions completed on classmates and Year 1 students.

Upper Quadrant and Lower Quadrant Anatomy Examinations

Written Examination I: Movement Examination (FMS/SFMA)

Written Examination II: SFMA/Analysis Cervical thru UE Pattern 2 with Sahrmann

Written Examination III: SFMA/Analysis Multi-Segmental thru ADDS with Sahrmann

Written Examination IV (**Final**): SFMA/Analysis Cervical thru ADDS with Sahrmann

Lab Practical I: Top Tier (Cervical thru UE 1 and 2 with Sahrmann)

Lab Practical II: Top Tier (Multi-Segmental thru ADDS with Sahrmann)

Lab Practical III: (**Final**): Top Tier (Cervical thru ADDS with Sahrmann)

Your grade is based upon the written assignment (evaluations, analyses, interventions); the written examinations; and the lab practical examinations. Weighting of grades is as follows:

Upper Quadrant/Spine Anatomy Exam

10.0%

Assignments:	
Top Tier & Breakouts and FMS Peer Checkoffs (x2): 2.5% each	5.0%
Breakout Analysis: Cervical thru UE Pattern 1 & 2 (x2): 2.5% each	5.0%
Breakout Analysis: Spinal Segmental thru ADDS (x2): 2.5% each	5.0%
Written Exam I: FMS, SFMA Top Tier & breakouts	8.0%
Written Exam II: Written: SFMA Top Tier & Breakouts with analysis: (Cervical thru UE Pattern 2 with Sahrman)	8.0%
Written Exam III: SFMA: Analysis II	8.0%
Practical Exam I: Top Tier (Cervical thru UE 1 and 2 with Sahrman)	10.0%
Lower Quadrant/Spine Anatomy Exam	10.0%
Written Exam IV: Final Examination: Comprehensive	11.0%
Practical Exam II: Final Comprehensive (Cervical thru ADDS with Sahrman)	15.0%
Attendance, Participation, and Peer Review	5.0%

GRADING SCALE:

A: 90%-100%	<i>To pass the course, written examinations with a score lower than 76% must be retaken and the student must achieve a passing grade. The original grade is retained for grading purposes. To pass a practical examination, a score of 80% must be achieved. Retakes of laboratory examinations follow guidelines of the Scholastic Standards document.</i>
B: 80%-89.9%	
C: 76%-79.9%	

For more information on grading policies, please refer to the [UND-PT Scholastic Standards Document](#)

COURSE ACCESS & TECHNICAL REQUIREMENTS

This course was developed and will be facilitated utilizing Blackboard. For access go to: <http://blackboard.UND.edu> and log in with your NDUS.Identifier. If you do not know your NDUS Identifier or have forgotten your password, please visit [Your NDUS Account Webpage](#)

Visit the [UND Technical Requirements](#) webpage for more information. Students are expected to use their official UND email in the course. For technical assistance, please contact [UND Technical Support](#) at 701.777.2222

ARTIFICIAL INTELLIGENCE (AI)

Artificial Intelligence tools are allowed in this course as approved by the instructor(s). Students are required to disclose if they use AI-generated text or images and how they apply it in their work. Failure of students to acknowledge their use of AI or using fabricated information could result in their violation of the Academic Integrity Policy. Students must ensure the originality of their work, maintain academic integrity, and avoid any type of plagiarism. The students need to understand the material and complete assignments on their own, using AI tools as a supplement rather than a replacement for their work. Students should not use sources that are cited by AI tools without having read them because generative AI tools can either create fake citations or cite a real piece of writing, but the cited content may be inaccurate. The faculty reserves the right to use various plagiarism-checking tools in evaluating students' work, including those screening for AI-

generated content, and impose consequences accordingly.
For more information on AI Policies, please visit [Artificial Intelligence Resources](#).

UNIVERSITY OF NORTH DAKOTA POLICIES & RESOURCES:

Nondiscrimination

It is the policy of the University of North Dakota that no person shall be discriminated against because of race, religion, age, color, gender, disability, national origin, creed, sexual orientation, gender identity, genetic information, marital status, veteran's status, or political belief or affiliation and the equal opportunity and access to facilities shall be available to all. Concerns regarding Title IX, Title VI, Title VII, ADA, and Section 504 may be addressed to Donna Smith, Assistant Vice President for Equal Opportunity and Title IX/ADA Coordinator, 401 Twamley Hall, 701.777.4171, UND.EO.TitleIX@UND.edu or the Office for Civil Rights, U.S. Dept. of Education, 230 S. Dearborn St., 37th Floor, 500 West Madison, Suite 1475, Chicago, IL 60611 or any other federal agency.

The full [Notice of Non-discrimination](#) is available online through Equal Opportunity & Title IX.

Accessibility Statement

The University of North Dakota is committed to providing equal access to students with documented disabilities. To ensure access to this class and your program, please contact <https://und.edu/student-life/student-disability-resources/index.html> to engage in a confidential discussion about accommodations for the classroom and clinical settings.

Accommodations are not provided retroactively. Students are encouraged to register with [Student Disability Resources](#) at the start of their program. More information can be obtained by email, UND.sdr@UND.edu, or by phone at 701.777.2100.

Religious Accommodations

UND offers religious accommodations, which are reasonable changes in the academic environment that enable a student to practice or observe a sincerely held religious belief without undue hardship on the University. Examples include time for prayer or the ability to attend religious events or observe a religious holiday. To request an accommodation, complete the [student religious accommodation request form](#). To learn more, please consult UND's [Religious Accommodations Policy](#) or contact the [Equal Opportunity & Title IX Office](#).

Pregnancy Accommodations

Students who need assistance with academic adjustments related to pregnancy or childbirth may contact the [Equal Opportunity & Title IX Office](#) or Academic Affairs to learn about your options. Additional information and services may be found at [Pregnancy Resources](#) and in [UND's Protections for Pregnant and Parenting Students and Employees Policy](#).

Reporting Discrimination, Harassment, or Sexual Misconduct

If you or a friend has experienced sexual misconduct, such as sex-based harassment, domestic violence, dating violence, or stalking, please contact the [Equal Opportunity & Title IX Office](#) or UND's Title IX Coordinator, Donna Smith, for assistance at 701.777.4171 or donna.smith@UND.edu.

You may also contact the Equal Opportunity & Title IX office if you or a friend has experienced discrimination or harassment based on a protected class, such as race, color, national origin, religion, age, disability, sex, sex characteristics, sexual orientation, gender identity, genetic information, pregnancy, marital or parental status, veteran's status, or political belief or affiliation.

Faculty Reporting Obligations Regarding Discrimination, Harassment, or Sexual Misconduct

It is important for students to understand that faculty are required to share with UND's Equal Opportunity & Title IX Office any incidents of potential sexual misconduct or of discrimination or harassment based on a protected class that they become aware of, even if those incidents occurred in the past or are disclosed as part of a class assignment. This does not mean an investigation will occur if the student does not want that, but it does allow UND to provide resources to help the student continue to be successful at UND. If you have been impacted by discrimination, harassment, or sexual misconduct, you can find information about confidential support services at the [Equal Opportunity & Title IX](#) webpage.

Health and Safety

UND is committed to maintaining a safe learning environment and asks students and instructors to be flexible when necessary to promote quality learning experiences.

Please do not attend an in-person class or lab if you are feeling ill or if you have been directed by health professionals to stay home.

- If you are not able to attend class or lab, please notify your instructor as soon as possible and discuss options for making up any missed work.
- If you will have an extended absence due to serious illness or other uncontrollable circumstances, you may request an absence notification through [Community Standards and Care Network](#).
- If your instructor is ill, they may need to cancel class or temporarily move your course to online delivery.

Please contact [Student Health Services](#) if you have health questions by calling 701.777.4500 or visiting myhealth.und.edu

Schedule:

DATE	TOPIC
Functional Movement Screen (FMS) and Systematic Functional Movement Assessment (SFMA).	
T, Aug 27	Introduction to Course; FMS
R, Aug 29	FMS
T, Sept 3	SFMA
R, Sept 5	SFMA
T, Sept 10	SFMA
R, Sept 12	SFMA
T, Sept 17	UQ/Spine Anatomy Review Exam
R, Sept 19	SFMA Top Tier and Breakouts CHECKOFFS
T, Sept 24	Review
R, Sept 26	Written Exam I: FMS and SFMA Top Tier and Breakouts
T, Oct 1	Cervical Breakout analysis
R, Oct 3	Shoulder Breakout Analysis: UE Pattern 1 and 2
T, Oct 8	SFMA Treatment (Cervical Spine, UE 1 & 2)
R, Oct 10	LQ/Spine Anatomy Review Exam
T, Oct 15	Breakout Analysis (Cervical thru UE Pattern 1 and 2): Partner 1 and 2: Assignment
R, Oct 17	Review
T, Oct 22	Written Exam II: SFMA Breakout with Analysis (cervical thru UE pattern 1 and 2)
R, Oct 24	Practical Exam I: SFMA Breakout with Analysis (cervical thru UE pattern 1 and 2)
T, Oct 29	Multi-Segmental Breakout Analysis (Flexion, Extension, and Rotation)
R, Oct 31	SFMA Treatment (Multi-Segmental Flexion, Extension, and Rotation)
T, Nov 5	Single Leg Stance and ADDS Breakout Analysis
R, Nov 7	SFMA Treatment (Single Leg Stance and ADDS)
T, Nov 12	Breakout Analysis (Multi-Segmental thru ADDS): Partner 1 and 2: Assignment

R, Nov 14	Review
T, Nov 19	Written Exam III: SFMA Breakout with Analysis (Multi-Segmental flexion thru ADDS)
R, Nov 21	Practical Exam II: SFMA Breakout with Analysis (Multi-Segmental flexion thru ADDS)
T, Nov 26	Full Body Evaluation of Partner 1 Develop HEP utilizing FMS screen; SFMA eval and Full Body Detailed Eval: Assignment
R, Nov 28	NO CLASS: HAPPY THANKSGIVING
T, Dec 3	FMS/SFMA and ANALYSIS: 1ST YEAR PT STUDENTS (7:30-8:30): Review (8:30-9:30)
R, Dec 5	FMS/SFMA and ANALYSIS: 1ST YEAR PT STUDENTS (7:30-8:30): Review (8:30-9:30)
T, Dec 10	Review of HEP, Appropriateness, Precautions, Additions, Corrections based on FMS screen; SFMA eval and Full Body Detailed Eval. Peer evaluation of HEP.
R, Dec 12	Review: Wrap Up
Dec TBD	FINAL Written IV and Practical Exam III: COMPREHENSIVE