Musculoskeletal Health Research B – Fundamental Concepts in Clinical and Health Services Research (MSK 9100)

COURSE INFORMATION

COURSE: Musculoskeletal Health Research B: Fundamental Concepts in Clinical and Health Services Research (MSK 9100)

COURSE MEETS: Winter Term, Tuesdays and Thursdays 4:00 to 5:30 PM
Location: CSTAR Multimedia Theatre B7-202, UH
(**Note:** atypical lecture times and locations are indicated on schedule)

ADMIN CONTACT:	Samantha Mundy	cmhruwo@uwo.ca
COURSE COMMITTEE:	Dr. Trevor Birmingham	tbirming@uwo.ca
	Dr. Jackie Marsh	
	Dr. David Holdsworth	
	Dr. Joy MacDermid	

OTHER INSTRUCTORS:
Dr. Lillian Barra
Dr. Ewa Cairns
Dr. Bert Chesworth
Dr. Amanda Lorbergs
Dr. Monica Maly
Dr. Michael Pest
Dr. David Walton
Dr. Kristyn Leitch

COURSE DESCRIPTION

This is a graduate level half-course developed for the Collaborative Graduate Program in Musculoskeletal Health Research. The transdisciplinary program includes trainees from diverse realms of musculoskeletal research, including biomedical, clinical, engineering, health services and population health.

MSK 9100 will be offered in the winter term of 2017 (January to April 2017).

OBJECTIVES

We have identified specific core concepts with which all MSK trainees should be knowledgeable. These concepts have been integrated into two half-courses:

- *Musculoskeletal Health Research A:* Biomedical and Bioengineering Concepts *(MSK 9000)*
- *Musculoskeletal Health Research B*: Concepts in Clinical and Health Services Research *(MSK 9100)*

Material in both courses will be taught at a level so that it is accessible by all participants (i.e. aimed at the non-specialist). For example, concepts in molecular biology will be described at a level understandable by engineering and clinical health sciences graduate students. Similarly, aspects of clinical research will be presented so that they are clear to graduate students in the biological sciences. The goal is to provide trainees from a variety of backgrounds with a common base of knowledge in musculoskeletal research concepts and terminology. By the end of these courses, students will be able to discuss musculoskeletal research with their peers from other disciplines, understand seminars on a broad range of musculoskeletal research topics, and comprehend publications from most realms of musculoskeletal research (eg, biomedical, engineering, health services and population health research).

Schedule

Musculoskeletal Health Research B – Fundamental Concepts in Clinical and Health Services Research (MSK 9100) 2016

Winter term 2017 – 12 weeks. Two lectures (90 min each) and typically one session of assigned student paper presentations (90 min) per block (6 blocks in total). Total 28 hours of class time.

Quantitative Clinical Research Designs (Week 1)			
Tues Jan 3	Quantitative Clinical Research Designs	Marsh/Birmingham	90 min
Thurs Jan 5	Clinical Trials: Issues in Interpretation	Marsh/Birmingham	90 min
Arthritis and Osteoporosis (Weeks 2, 3, 4)			
Tue Jan 10	Rheumatoid Arthritis (Pathogenesis)	Cairns	45 min
Thurs Jan 12	Osteoarthritis (Pathogenesis)	Pest	45 min
Tuesday Jan 17	Rheumatoid Arthritis & Osteoarthritis (Clinical Care)	Barra	90 min
Thurs Jan 19	Osteoporosis (Pathogenesis & Clinical Care)	Lorbergs	90 min
Imaging of Musculoskeletal Conditions (Weeks 5 & 6)			
Tues Jan 31	Imaging of Musculoskeletal Conditions 1	Holdsworth	90 min
Thurs Feb 2	Imaging of Musculoskeletal Conditions 2	Holdsworth	90 min
Thursday Feb 9	**Midterm Exam**	Course Committee	120min
Gait Analysis (Weeks 7 & 8)			
Tues Feb 21	Introduction to Gait Analysis	Leitch	90 min
Thurs Feb 23 (WOBL)	Motion Capture / Dynamic radiography Lab Module	Leitch	90 min
Pain and Disability in Musculoskeletal Health Research (Weeks 9 & 10)			
Tues Mar 7	Qualitative Research in MSK Health Research	Maly	90 min
Tues Mar 14	Measuring Pain and Disability in MSK Disorders	Walton	90 min
Thurs Mar 16	Student Presentation	Birmingham	90 min
Principles of Knowledge Translation and Health Services Research (Weeks 11 & 12)			
Tues March 21	An Introduction to Health Services Research	Chesworth	90 min
Thurs March 23	Economic Evaluation in MSK Health Research	Marsh	90 min
Thurs March 30	Student Presentation	Chesworth/Marsh	90 min
Thursday April 6th (Week 13)	**Final Exam**	Course Committee	120 min

STUDENT EVALUATION
Student Presentations (30%)
Lab Module (10%)
Midterm Exam (30%)
Final Exam (30%)

Please Note: The schedule and procedures are subject to change in the event of extenuating circumstances

Academic Honesty:
Academic honesty is a cornerstone of conduct at The University of Western Ontario. We cannot have freedom of expression without integrity. Students are responsible for understanding the nature of and avoiding the occurrence of plagiarism and other academic offences; please refer to the section on "Scholastic Offences" in the current University Academic Calendar, or on the web at http://www.uwo.ca/grad/section_ten.htm. Such offences include plagiarism, cheating on an examination, submitting false or fraudulent assignments or credentials, impersonating a candidate, or submitting for credit in any course any academic work for which credit has previously been obtained or is being sought in another course in this University or elsewhere (without the knowledge and approval of the instructor to whom the work is submitted).

Revised Feb 2017