



**School of Physical and Occupational Therapy**  
**3654 Drummond Street**  
**Montreal, Quebec**  
**H3G 1Y5**

# **COURSE GUIDE**

## **B.Sc. (PHYSICAL THERAPY) U-1**

**2000-2001**

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#### PROFESSIONAL COURSE DESCRIPTIONS

#### COMBINED PHYSICAL & OCCUPATIONAL THERAPY FIRST YEAR COURSES

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**McGILL UNIVERSITY - PHYSICAL AND OCCUPATIONAL THERAPY - U1 - U2 - U3**

**U1 CURRICULA PLAN - 2000-2001 - PHYSICAL THERAPY PROGRAM**

**FALL: TERM A**

Academic Term (13 wks) + Exams (2 wks) = Total 15 wks

<b>Academic Term</b> Sept 5 - Dec 6	<b>Exams</b> Dec 7 - 21
504-315A ANATOMY 4cr	
552-201A PHYSIOLOGY 3cr	
582-248A COMMUNICATION/PROFESSIONALISM 2cr	
582-239A ASSESSMENT IN REHABILITATION I 2cr	
582-260A LIFE SPAN 2cr	
581-235A MOVEMENT SCIENCE & PRACTICE 3cr	

**WINTER: TERM B**

Academic Term (10 wks) + Exams (1 wk)+ Clinical I (6 wks) + Integration Block (3 wks) + Exams (1 wk) = Total 21 wks

<b>Academic Term</b> Jan 3 - Mar 9	<b>Exams</b> Mar 12 - 16	<b>Clinical Block</b> Mar 19 - Apr 27	<b>Integration Block</b> May 1 - 23	<b>Exams</b> May 24 -31
504-316B ANATOMY 2cr		581-220B CLINICAL AFFILIATION I	582-222B KINESIOLOGY 3cr	
552-202B PHYSIOLOGY 3cr			581-236B MOVEMENT I: Musculoskeletal 4cr	
582-250B HEALTH CARE AND PROFESSIONALISM 2cr				
581-241B ASSESSMENT II: MUSCULOSKELETAL 2cr				
581-236B MOVEMENT I: MUSCULOSKELETAL 4cr				

Note: 581 - PT  
582 - OT/PT

**Term A:**

Sept. 5 to Dec. 6, 2000

**Exam Period:**

Dec. 7 to 21, 2000

**Term B:**

Jan. 3 to Mar. 9, 2001

**Exam Period:**

Mar. 12 to 16, 2001

**Clinical Affiliation:**

Mar. 19 to Apr. 27, 2001

**Courses:**

May 1 to 23, 2001

**Exam Period:**

May 24 to 31, 2001

<b>2000-2001 OCCUPATIONAL THERAPY PROGRAM - U1</b>		
<b>Course Number</b>	<b>Course Name</b>	<b>Credits</b>
504-315A	Regional Anatomy of the Limbs & Back	4
552-201A	Human Physiology: Control Systems	3
582-239A	Assessment in Rehabilitation I	2
582-248A	Communication/Professionalism	2
582-260A	Life Span	2
580-235A	Occupation as Therapy	3
504-316B	Human Visceral Anatomy	2
552-202B	Human Physiology: Body Functions	3
582-222B	Kinesiology	3
582-250B	Health Care and Professionalism	2
580-236B	OT Practice I : Musculoskeletal Conditions	4
580-240B	Assessment of Performance I	2
580-220B	Clinical Affiliation I	0
<b>TERMS A &amp; B - TOTAL CREDITS</b>		<b>32</b>

<b>2000-2001 PHYSICAL THERAPY PROGRAM - U1</b>		
<b>Course Number</b>	<b>Course Name</b>	<b>Credits</b>
504-315A	Regional Anatomy of the Limbs & Back	4
552-201A	Human Physiology: Control Systems	3
582-239A	Assessment in Rehabilitation I	2
582-248A	Communication/Professionalism	2
582-260A	Life Span	2
581-235A	Movement Science & Practice	3
504-316B	Human Visceral Anatomy	2
552-202B	Human Physiology: Body Functions	3
582-222B	Kinesiology	3
582-250B	Health Care And Professionalism	2
581-241B	Assessment II: Musculoskeletal	2
581-236B	Movement I: Musculoskeletal	4
581-220B	Clinical Affiliation I	0
<b>TERMS A &amp; B - TOTAL CREDITS</b>		<b>32</b>

**504-315A - REGIONAL ANATOMY OF THE LIMBS & BACK****Credits:** 4**Lecturers:** *Regional Anatomy Section:* G. C. Bennett, Department of Anatomy  
*Functional Anatomy Section:* S. Beaulieu, T. Norcia, N. Liverani**COURSE STRUCTURE**

A lecture and laboratory course of 2 hours of lecture and 4 hours of prosection including 2-3 sessions on dissection and 2 hours of functional laboratory per week. This course will cover regional gross anatomy of the skeleton, joints, muscles and neurovascular structures of the limbs and back. Lectures and the prosection laboratory will be given by the Department of Anatomy. The functional anatomy laboratory will be given by the School of Physical and Occupational Therapy.

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**REGIONAL ANATOMY SECTION****STRUCTURE**

This section consists of 2 hour lecture sessions per week and 2 hour laboratory periods per group per week starting Wednesday, September 6, 2000.

**OBJECTIVES**

Emphasis is placed on understanding anatomical concepts rather than rote memorization. Upon completion of this section, the student will be able to understand and utilize the acquired anatomical information as needed in other professional courses:

1. The movements of the different body segments in terms of planes and axes.
2. The bones of the skeleton in terms of why they have the architecture they do, how this relates to their function and the stresses acting upon them and the areas of weakness of bones in terms of possible fracture sites.
3. The structure of different types of joints and their supporting ligaments and tendons, the movements permitted and the factors that make them susceptible to dislocation, inflammation or calcification.
4. The structure of different types of bursae and tendon sheaths, and the factors that make them susceptible to bursitis or tenosynovitis.
5. The importance of fasciae (and retinaculae), in terms of compartmentalization, muscle function, impingement problems (e.g. carpal tunnel syndrome), and containment spread of infections.
6. The structure, attachment sites and functions of different muscles and muscle groups, especially in terms of neural control of functional movements.
7. The structure, relationships and distribution of peripheral nerves, especially in terms of their sites of potential injury and the effects of such injury on loss of muscle function or cutaneous sensation.
  - i) The structure, relationships and distribution of arteries and veins, especially in terms of their sites

of potential injury and the effects of such injury on loss of muscle function, gangrene, etc.

- ii) The importance of anastomoses around joints, in terms of maintaining blood supply to distal regions if a vessel is occluded.
- 8. The differences between the Lower Limb and Upper Limb, in terms of the specialized function of the Lower Limb for locomotion (stance and gait) and the Upper Limb for hand manipulation.
- 9. An elementary understanding of radiology and other clinically important imaging techniques, and their role in the assessment of both normal anatomy and traumatic or pathological alterations.

### **LABORATORY ETIQUETTE**

**Necessary Equipment:**

- C lab coat
- C instruments (forceps, etc.)
- C latex gloves

#### **Use of Laboratory During Laboratory Periods:**

- C entry to the GROSS LABORATORY at all times is strictly restricted to students registered in Anatomy courses in our department (Physical and Occupational Therapy; Medicine; Dentistry; B.Sc. Students in 504-214 course)
- C respect for cadavers (all donated)
- C no food or drink
- C no photographs
- C dissections are kept in plastic bags, along with moistened cloth rags
- C each plastic bag is identified with a clothes-peg
- C each dissection is identified with a tag
- C dissections are preserved with mixture of aldehyde, phenol and alcohol
- C dissections and accompanying cloth rags must be continually kept moist with new alcohol solution

### **REQUIRED TEXT**

Course Pack.

### **EVALUATION**

#### **Regional Anatomy Section:**

Written multiple choice examinations:

Mid-Term			
Final Exam	33.6%	<b>TOTAL:</b>	56%

Laboratory examinations:

"Spot" Exam			
Mid-Term	9.6%		
Final Exam	14.4%	<b>TOTAL:</b>	<u>24%</u>
			80%

**FUNCTIONAL ANATOMY SECTION****COURSE STRUCTURE**

This section consists of laboratory sessions of 2 hours per week for 12 weeks starting Wednesday, September 6, 2000.

**OBJECTIVES**

Upon completion of this section, the student therapist will be able to:

1. Visually inspect, palpate and identify:
  - C bony landmarks
  - C soft tissue structures
  - C arterial pulses
2. Demonstrate and interpret the movement of body segments in terms of planes and axes.
3. Identify and understand muscle actions: isotonic, isometric, concentric and eccentric contractions.
4. Demonstrate normal muscles in action.
5. Interpret potential patterns of muscle weakness or paralysis due to dysfunction of nerves, muscles and joints.
6. Identify joint structures and understand movement of specific joints (according to classification).
7. Demonstrate professional behaviour throughout the labs.
8. Demonstrate organization skills by completing the lab preparation activities.

**TOPICS**

Prior to each lab, students will have prepared a list of all the bony landmarks, soft tissue structures and arterial pulses that they will be palpating as per Jenkins (1998).

1. The bony landmarks and soft tissue structures of the following areas will be covered:
  - C shoulder girdle
  - C cervical spine
  - C thoracic spine
  - C lumbar spine
  - C brachium
  - C elbow
  - C forearm
  - C wrist
  - C hand
  - C hip
  - C pelvis
  - C thigh
  - C knee
  - C leg
  - C ankle
  - C foot

2. Students will be able to palpate the arterial pulses of:

- C brachial artery (axilla and elbow)
- C the radial artery
- C the ulnar artery
- C the femoral artery
- C the popliteal artery
- C dorsal pedal artery

**REQUIRED DRESS FOR LABORATORY SESSIONS**

- C Shorts and Shirts (females: halter-type or racer back tops)
- C Name Tags (purchase to be organized by class)
- C Towel for draping

**REQUIRED TEXT**

Jenkins, D. (Ed.). (1998). *Hollinshead's Functional Anatomy of the Limbs & Back*, (7<sup>th</sup> edition). Saunders.

**RECOMMENDED READING**

Hoppenfeld, S. (1976). *Physical Examination of the Spine & Extremities*. New York, Prentice-Hall.

**EVALUATION**

Functional Anatomy Section: 20%

**Note: Students who miss more than three (3) practical laboratories without a legitimate reason will not be permitted to take the final examination.**

**The student therapist is expected to present a professional approach throughout all of his/her learning experience.**

**582-222B KINESIOLOGY**

**Credits:** 3

**Lecturer:** S. De Serres (Coordinator), J.P. Dumas, Guest Lecturers

**COURSE STRUCTURE**

This 48 hour course is given in lecture, seminar and/or practical formats. The course commences on Tuesday, May 1, 2001 and runs until Wednesday, May 23, 2001. The class will be taught in a 3-hour block every morning (9:00 a.m. to 12:00 p.m.).

**OBJECTIVES**

Upon completion of this course, the student should be able to:

***Skills and Behaviours:***

1. Identify the developmental level of an individual relative to current knowledge.
2. Interpret and evaluate the validity of kinematic, kinetic and EMG methods at a beginning level.
3. Perform measurement of angular movement, linear displacement, velocity, muscle activity patterns and force, and joint torque.
4. Utilize basic biomechanical principles in interpretation, modification and selection of testing and treatment, intervention and worksite modifications.
5. Use a critical appraisal approach in understanding the motor control approach to practice.
6. Utilize a critical appraisal approach to kinesiology as applied to physical and occupational therapy.
7. Construct functional restoration programs consistent with specific needs such as aging, changing work demands and environment.
8. Become a critical consumer of the literature with the goal of applying the knowledge to clinical practice.
9. Collaborate effectively with other health professionals.
10. Carry out a literature review, demonstrate library skills, write purposefully, and prepare a specific report.
11. Become aware of client satisfaction, particularly related to outcomes: predicted vs actual.
12. Define problems from the client's perspective, occupation and lifestyle, including anticipated problems.
13. Determine continuation, progression or discontinuation of interventions based on evaluative tools.
14. Assess and interpret gait, balance and coordination, posture, range of motion, fatigue, endurance and strength from a kinesiological perspective (use of EMG, kinematics and kinetics).

***Knowledge:***

1. Define kinematics and explain how it may be used as an evaluative tool.
2. Define kinetics, distinguish between static and dynamical analysis, and explain how it may be used as an evaluative tool.
3. Define electromyography, and describe the origin, characteristics and measurement of EMG signals.



4. Discuss the qualitative and quantitative principles of motion and posture analysis.
5. Discuss the modifiers which may affect motor learning/control, including motor development and aging, orthotics, prosthetics and assistive devices, gender and body structure, and environment.
6. Use an integrated approach in application of intervention and outcome measurement as applied to: balance, posture and coordination, functional abilities evaluation, lifting, locomotion, occupational tasks and physical demands analysis.
7. Become acquainted with principles of ergonomics and practices, and return to work process.
8. Describe motor unit recruitment and the relationships to force production, fatigue and pathology.
9. Relate how principles of kinesiology may be used to evaluate programs, qualitative and quantitative research.
10. Use principles of preparing a scientific report, including literature review, evaluation of information, argument synthesis and graphical presentation.
11. Discuss theories of motor control as applied to kinematic and kinetic analysis: dynamical systems, distributed control.
12. Discuss how neural plasticity may be important in designing and evaluating interventions.

**CONTENT**

May 1-23, 2001

Week 1	MUSCLE MECHANICS and EMG
Week 2	EMG and KINETICS
Week 3	KINEMATICS, EMG, KINETICS: PUTTING IT TOGETHER

**REQUIRED TEXT**

Course Pack.

**RECOMMENDED TEXT**

Whiting, W.C. and Zernicke, R. F. (1998). *Biomechanics of Musculoskeletal Injury*. Windsor, Ontario, Human Kinetics.

**EVALUATION**

To be announced.

**582-239A - ASSESSMENT IN REHABILITATION I**

**Credits:** 2

**Lecturers:** S. Beaulieu (Co-coordinator), I. Zompa (Co-coordinator), N. Gervais

**COURSE STRUCTURE**

This course includes 2 hours of lecture and 2 hours laboratory sessions per week with small group work and both instructor-directed and student-directed learning experiences.

**GOAL**

The student therapist will acquire beginning-level knowledge and skills necessary for the basic physical assessment of clients seen by physical and occupational therapists.

**OUTCOMES**

**Upon completion of this section, the student therapist will demonstrate knowledge by being able to:**

1. Reinforce material learned in Anatomy - 504-315A.
2. Interpret and apply the basic principles of reliability and validity theory to physical assessment.
3. Apply the knowledge learned in the following areas:
  - a) Manual muscle testing
  - b) Goniometry
  - c) Evaluation of sensory function
  - d) Evaluation of hand and finger strength
  - e) Evaluation of oedema
  - f) Evaluation of posture
  - g) Evaluation of gait and its deviations
4. Recall the components of an initial history taking interview.
5. Justify the rationale for doing a history taking interview.
6. Explain the SOAP system of charting.
7. Organize statements into subjective and objective domains.
8. Integrate knowledge learned in Anatomy - 504-315A to identify potential patterns of muscle weakness.

**The student will be able to perform the following skills:**

1. Accurately demonstrate:
  - a) Palpation of bony and soft tissue landmark
  - b) Visual inspection
  - c) Manual muscle testing

- d) Use of hand-held dynamometer
  - e) Goniometry
  - f) Evaluation of sensory function
  - g) Evaluation of hand and finger strength
  - h) Evaluation of oedema
  - i) Evaluation of posture
  - j) Evaluation of gait and its deviations
  - k) Patterns of muscle weakness
2. Document the information obtained in the objective evaluation in SOAP format.
  3. Conduct an initial history taking interview.
  4. Document the information obtained in an initial history taking interview in SOAP format.
  5. Demonstrate safe and effective patient handling skills.
  6. Show respect for peers, self and faculty.
  7. Demonstrate the ability to establish rapport with simulated patients.
  8. Demonstrate a respect for the clinical involvement of other health professionals to avoid unnecessary duplication of services provided to the client.

**Moreover the student will demonstrate the following learning behaviours:**

1. Be prepared for each lab/lecture session.
2. Be punctual at all times.
3. Be able to accept constructive criticism.
4. Be able to identify concepts that are not understood and to formulate appropriate questions for clarification.
5. Formulate appropriate questions to clarify the above-mentioned concepts.
6. Be able to develop and maintain team/group building skills.

**COURSE CONTENT**

Learning activities have been organized using a regional approach which is complementary to the course ***Regional Anatomy of the Limbs and Back - 504-315A***.

**REQUIRED DRESS FOR LABORATORY SESSIONS**

- C Shorts and Shirts (females: halter-type or racer-back tops)
- C Name Tags (purchase to be organized by class)

**REQUIRED REFERENCES \*required in other course(s)**

**For palpation:**

\* Anatomy - 504-315A Textbooks and course material.

**For goniometry and manual muscle testing:**

Palmer, M.L. and Epler, M.E. (1998). *Fundamentals of Musculoskeletal Assessment Techniques*, (2<sup>nd</sup> edition). Philadelphia, Lippincott.

**For selected topics:**

Assessment in Rehabilitation I - 582-239A Course Pack.

**RECOMMENDED REFERENCES**

**For posture and gait:**

Magee, D.J. (1992). *Orthopedic Physical Assessment*. Philadelphia, W.B Saunders.  
(Book is on reserve in the Health Sciences Library)

**REQUIRED MATERIALS**

Clinical Tools Kit (purchased in class during the first week, price to be announced)

Goniometers: 360°, 30 cm

180°, 15 cm

Finger

Transfer belt

Tape measure

**STUDENT EVALUATION**

To be announced at the first day of class, but will include at least:

Written Mid-Term Examination: 40% (Date to be announced)

Practical Final Examination 60% (In the final exam period)

**N.B. The final practical exam must be passed with a C+ or better in order to pass the course and in order to be admitted to the first clinical placement (OT Clinical Affiliation I - 580-220B or PT Clinical Affiliation I - 581-220B).**

**582-248A - COMMUNICATION/PROFESSIONALISM**

**Credits:** 2

**Lecturers:** **Part A:** E. Aston-McCrimmon (Coordinator), S. Grant, N. Korner-Bitensky  
**Part B:** N. Larivière (Coordinator)

**COURSE STRUCTURE**

Two hours per week for thirteen weeks. The format will include lecture/seminar/class participation. This series will be given on Thursdays from 1:30 p.m. to 3:30 p.m. starting on September 7, 2000.

This course is divided into two parts: **Part A:** September 7 to 21, 2000  
**Part B:** September 28 to November 30, 2000

**Part A**

Topics to be covered:

- The World Health Care Model: Health Impairment, Disability and Handicap
- An introduction to problem solving, case-based and evidence based practice modes
- An exploration of present available information systems used by Health Care practitioners

For Course Objectives please refer to Health Care And Professionalism 582-250B.

**Part B**

This section shall explore two integrated themes:

Theme 1: The fundamentals of communication

Theme 2: Psychosocial Issues in Health, Impairment, Disability and Handicap

**COURSE OBJECTIVES**

Rehabilitation services should provide competent and compassionate therapeutic interventions. Towards this aim, this course shall:

1. allow students to acquire the fundamental skills and strategies necessary for effective professional communication;
2. prepare students to deal with a number of psychosocial issues which have implications for impairment, disability and handicap, and an impact on rehabilitation and well-being.

**REQUIRED TEXTS**

Adler, R.B. and Rodman, G. (1994). *Understanding Human Communication*. (5<sup>th</sup> edition). Fort Worth, Texas, Brace Harcourt.  
Course Pack.

**EVALUATION**

**Part A:** Computer based Assignment 5%

Due: no later than October 26, 2000

**Part B:** To be announced.

**582-250B - HEALTH CARE AND PROFESSIONALISM**

**Credits:** 2

**Lecturers:** L. Asseraf-Pasin (Coordinator), E. Aston-McCrimmon, A. Thomas, Guest Lecturers

**COURSE STRUCTURE**

This course will incorporate lectures/seminars/panel presentations and a research reading project to be done over 9 weeks for 2 to 3½ hours per week. *The first 2 sections of the Course Objectives will be covered in Communication/Professionalism 582-248A given in Term A. \**

**OVERALL OBJECTIVES**

Effective delivery of rehabilitation services requires that the entry level practitioner recognize and respond to the influence of social, cultural, economic, legislative and demographic factors impacting on health and rehabilitation service delivery, both locally and globally. This is a companion course with Communication/Professionalism 582-248A.

**COURSE OBJECTIVES**

**I PROVINCIAL, NATIONAL AND INTERNATIONAL HEALTH CARE POLICY**

**\* 1. World Health Environment**

- International health definitions and parameters including:
  - social, physical, cultural and spiritual context of health
  - World Health Organization (WHO) definition of health
  - WHO International Classification of Impairments, Disabilities and Handicaps
- Determinants of health
- Population/community health indicators and measurements used globally, health status and risk status factors
- Principles and methods of disease prevention and health promotion from a global perspective

*So that the graduate will have acquired the **Skills and Behaviours** to:*

- interpret and manage clinical issues with a broad understanding of external factors which influence health and social status;
- incorporate international health perspectives and experience within evidence-based practice.

**\* 2. Information Systems**

- Introduction to concepts of life long, self-directed, evidence based and distance learning.
- Orientation to available learning resources and Health Information Systems ie. library resources, CD ROMS, Internet.

*So that the graduate will have acquired the **Skills and Behaviours** to:*

- be able to access, interpret and use data and information acquired from a variety of sources for evidence-based practice and research;
- keep abreast of and be able to adapt to changing and developing information systems as they relate to Health Care Policy, Systems and Delivery.

### 3. Canadian and Quebec Health Care Systems

- Health and social service legislation/policy including:
  - Canada Health Act
  - Relevant federal/provincial legislation
- Relevant health and social service organizations which influence and/or assist the delivery of health and social services
- Funding mechanisms (public and private) which will support health and social service needs, goals and/or research for individuals and groups
- Provincial licensing regulations re practitioners, practices, institutions
- Consent to treatment, power of attorney etc. as applied to persons with disabilities

*So that the graduate will have acquired the **Skills and Behaviours** to:*

- be sensitive to the impact of public policy (present and future) on rehabilitation services;
- be able to suggest strategies to influence public policy;
- optimize benefits for clients by judicious use of knowledge of policy, legislation and funding sources;
- be sensitive to ethical and legal considerations in health service delivery including rationing of health care.

## II PROFESSIONALISM

### 1. Ethical Dimensions

The entry-level therapist has distinctive knowledge, skills and behaviours which characterizes her/him as a professional and which forms the basis for professional practice. The professional will have an understanding of the following concepts:

1. A scientific body of knowledge that forms the basis of evidence-based practice.
2. Independent practice is supported by autonomy, self-regulation and direct access.
3. Ethical behaviour based on a personal code of behaviour rules of conduct and values, legal requirements and a professional code of ethics.
4. Professional legal, regulatory status.
5. The variety of professional roles incorporated within professional practice include **traditional and innovative roles:**

*from:* Clinician, learner, entrepreneur, supervisor, delegator, leader, manager, consultant, educator, researcher

*to:* Negotiator, lobbyist, expert witness and change agent.

6. Scope of practice of Occupational Therapy, Physical Therapy and of other descriptions.
7. Professional Associations' roles and responsibilities including ways and means of influencing public policies.

*So that the graduate will demonstrate the **skills and behaviours** that promote:*

- the value of evidence-based practice and its acceptance as forming the cornerstone of all practice;
- respect of culture and ethics of particular groups or individuals;
- interactions with clients, colleagues, employers and others with emphasis on
  - accountability and responsibility
  - commitment
  - effective communication;
- respect of professional standards (standards of practice and clinical guidelines);

- identification with professional associations/affiliations;
- the qualities of:
  - appetite for life-long learning
  - thoughtful, reflective practice
  - ongoing self-evaluation
  - knowledge of limitations
  - ability to refer
  - assertiveness
  - effective communication skills (verbal, nonverbal, written)
  - critical thinking
  - effective
    - clinical decision making
    - critical analysis
    - ability to negotiate
    - ability to manage conflict
  - 'best practice' at all times, basing decisions and actions on **outcome measures**

## 2. Professional and Support based - Collaborative Team Relationships

Topics: Client-centred care  
 Multidisciplinary vs. Interdisciplinary vs. Pluridisciplinary  
 The team member attributes  
 Professional roles incorporated within professional practice

So that the graduate will have acquired the **skills and behaviours** to:

- involve the client in planning and managing rehabilitation therapy;
- facilitate the empowerment of clients by providing information and encouraging independence; involving self-help/advocacy resources as appropriate;
- promote effective team work;
- promote efficient collaboration between the different parties involved in the health care process;
- promote interactions with colleagues, clients, employers and others with emphasis on
  - accountability
  - commitment
  - effective communication.

## REQUIRED TEXTS

Scott, R. (1998). Professional Ethics: A Guide for Rehabilitation Professionals. Mosby.

Parsons & Parsons. Health Care Ethics. Wall & Emerson Inc.

The Professional Code, Éditeur officielle du Québec.

## RECOMMENDED TEXT

Bill 120, An Act Respecting Health Services and Social Services and Amending Various Legislation, Assented to 4 September 1991, Québec Official Publisher (1991).

Williams & Wilkins (1997). Stedman's Concise Medical Dictionary for the Health Professional, (3<sup>RD</sup> edition).



**REFERENCE TEXTS**

Rachlis, M. & Kushner, C. (1994). *Strong Medicine*. Harper Perennial, Harper Collins Publishers Ltd.

Purtilo, R. (1993). *Ethical Dimensions in the Health Professions*, (2<sup>nd</sup> edition). W.B. Saunders Co.

**EVALUATION**

Topics covered in this course form a framework for professional practice. Evaluation of the application of this material will be through further professional courses given over the next three years and in professional practice.

Research Health Project	50%	(To be handed in by March 7, 2001)
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Essay/Short-answer Exam	50%	(To be done during the March 12-16, 2001 Examination period)
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**582-260A - LIFE SPAN**

**Credits:** 2

**Lecturers:** R. Birnbaum (Coordinator), Guest Lecturers

**COURSE STRUCTURE**

This is an interactive lecture course, 2 hours per week for Term A.

**GOAL**

This course will provide an overview of competency across performance domains through the life span.

**LEARNING OBJECTIVES**

1. To appreciate that the life span is an ongoing developmental process involving both continuity and change, and is influenced by genetic and environmental factors.
2. To summarize different developmental events from the perspective of major developmental theories.
3. To be aware of neuromaturational and motor control theories of motor development.
4. To appreciate the sequence of development that occurs across sensory, cognitive/perceptual, physical/motor, play/leisure, language, and psychosocial domains from conception to death.
5. To characterize the unique changes associated with each stage of development.
6. To understand the influences of cultural background as well as family dynamics on development.
7. To appreciate major areas of controversy and new directions in the study of human development.
8. To begin to apply a self-directed approach to learning.

**CONTENT**

- Developmental theories and controversies
- Basic embryology and genetics
- Neonatal neurobehavioral performance
- Motor principles and theories
- Developmental competency in gross motor, fine motor, perceptual, cognitive, social, behavioral, play, daily living skills and language for the:
  - a) infant
  - b) preschooler
  - c) school age child
  - d) adolescent
- Family function and cultural background and their effects on development.

- Theories and developmental changes characteristic of the young adult and during the middle years.
- Physiologic, psychosocial, and cognitive changes associated with aging.
- Changing roles and activities in the elderly.
- Death and dying.

**REQUIRED TEXT**

Berger, K.S. (1997). *The developing person through the life span*. New York, Worth Publishers.

**EVALUATION**

Child Observation	30%
Midterm Examination	30%
Final Examination	40%

**581-220B - CLINICAL AFFILIATION I****Credits:** 0**Lecturer:** L. Asseraf-Pasin, Acting Academic Clinical Coordinator, P.A. Wells (On Leave)**COURSE STRUCTURE**

This course is the first of five Clinical Affiliation courses commencing in U1 and continuing throughout the three years of the program. Clinical experience in the various McGill teaching hospitals or other accredited centres is provided. The student is given the opportunity to practice physical therapy, to observe in other clinical disciplines and participate in teaching rounds and in in-service education. An evaluation of performance is given for each rotation by the supervising therapists who use the clinical assessment form “*Clinical Performance Instrument*”, shown on the following pages. The final evaluation for this rotation will be used to judge the clinical competence of the student as part of the overall evaluation of the clinical affiliation program.

If a student does not achieve a satisfactory standing on a particular rotation, **IT MUST BE REPEATED AND A SATISFACTORY LEVEL OF ACHIEVEMENT MUST BE OBTAINED.** If a student is unsuccessful in the repeat rotation, he/she will be asked to withdraw from the program. Every effort will be made to arrange the repeat rotation within the three-year period. As this, however, is not always possible, students required to complete an additional clinical rotation should be prepared to convocate in the Fall of the final year. **Please note that only one rotation may be repeated if failed. A failure of any subsequent Clinical Affiliation course will require the student to withdraw from the program.** Satisfactory standing in all required professional courses and clinical placements each year are mandatory to be able to continue in the Physical Therapy program. Students must complete the appropriate professional courses before undertaking the designated clinical course for their level of training. If a clinical placement has to be deferred which would lead to it being completed out of the specified program sequence of professional-clinical-professional courses, the student may not be given permission to take the subsequent professional courses until that clinical placement has been successfully completed. This would lead to delayed graduation.

Please refer to section *f) of the Academic Advancement in the Academic Regulations*. These regulations apply to all five clinical affiliation courses given over the three years.

**OBJECTIVES**

The purpose of the clinical affiliation program is to:

1. orientate the student to hospital organization and department functioning;
2. orientate the student to the role of the therapist in the orthopaedic setting (including rheumatology, burns and plastics);
3. develop the student's awareness of professional behaviour in accordance with the code of ethics (OPQ);
4. develop the student's sense of observation in order that the student recognizes the facts pertinent to the presenting problem;
5. develop the student's skills in recognizing the physical and psychological needs of the patient;

6. provide the opportunity for the student to apply previous theoretical knowledge;
7. provide the opportunity for the student to observe and subsequently perform a complete orthopaedic assessment;
8. provide the opportunity for the student to gain experience in application of treatment techniques;
9. guide the student in the development of communication skills - (patient and health personnel);
10. provide the student with guidance and experience in methods of recording;
11. provide the student with the opportunity to learn about achievable outcomes;
12. expose the student to differential diagnosis and predictive physical therapy.

**CONTENT**

Orthopaedics - in-patient and out-patient, adult and children.

**Format**

The Physical Therapy Program is made up of 105 credits of academic and clinical courses given over three years in seven semesters. The five Clinical Affiliation courses make up over 1000 hours of clinical practice and have a course value of 18 credits. These clinical affiliations start in Term B of Year one, incorporate a summer semester of 12 weeks between Years two and three and finish with a fall and winter block in Year three.

<b>U1 Winter Term</b>	<b>581-220B</b>	<b>6 weeks</b>	<b>0 credits</b>
<b>U2 Summer Term</b>	<b>581-320C</b>	<b>6 weeks</b>	<b>6 credits</b>
<b>U2 Summer Term</b>	<b>581-321C</b>	<b>6 weeks</b>	<b>6 credits</b>
<b>U3 Fall Term</b>	<b>581-420A</b>	<b>5 weeks</b>	<b>3 credits</b>
<b>U3 Winter Term</b>	<b>581-421B</b>	<b>5 weeks</b>	<b>3 credits</b>

**Clinical Session Dates - 2000-2001**

<b>U1 Session I</b>	<b>March 19 - April 27, 2001</b>
<b>U2 Session II*</b>	<b>April 30 - June 8, 2001</b>
<b>U2 Session III</b>	<b>June 11 - July 20, 2001</b>
<b>U2 Session IV</b>	<b>July 23 - August 31, 2001</b>

**\*Only two of the three sessions in the Summer Term must be completed by U2 students.**

<b>U3 Session V</b>	<b>November 13 - December 15, 2000</b>
<b>U3 Session VI</b>	<b>January 3 - February 2, 2001</b>

**DRESS CODE**

Each student is responsible to purchase the following for use in the clinical setting: full length navy blue pants; white top either polo style or shirt with sleeves; plain white or navy sweater may be worn over the shirt. Walking

shoes (no canvas shoes or sandals) and matching socks are required. An identification tag (purchased through the Students Society) is compulsory and must be worn on the outside of the shirt or sweater at all times when in the clinical setting.

### **REFERENCE MATERIALS**

As required by the particular rotation and clinical instructors during the affiliation.

### **STUDENT EVALUATION**

Each rotation will be evaluated by a supervising therapist, using the clinical assessment form, "*Clinical Performance Instrument*", to be credited as follows:

581-220B - 0 credits

581-320C - 6 credits

581-420A - 3 credits

581-321C - 6 credits

581-421B - 3 credits

### **HOSPITAL EVALUATION**

For each rotation the student is required to complete the "Student Evaluation of Hospital Affiliation" form. The completed form must be handed to the Centre Coordinator of Clinical Education on the last day of the rotation. As well, students must complete a self-evaluation form.

### **STUDENT EXPERIENCE BOOKLET**

During the clinical program the students are required to complete the appropriate clinical experience sheets. The booklet is made available in March of the first year of studies and must be picked up from Room D20 by March 15th. The student is responsible to enter the information on each rotation and present it to the next hospital. **Following completion of the final rotation in U3 the completed booklet must be returned to the Academic Coordinator of Clinical Education, Room 39, Davis House. Failure to do so may result in a delay of final clinical mark and graduation.**

### **HOSPITAL HANDBOOK**

Prior to **one week before** the beginning of a rotation the student must obtain the Hospital Handbook from the Main Office (D20). The student is expected to read it before the start of the rotation.

### **IMMUNIZATION**

**Before entering the first clinical placement:** All students must obtain the immunization card from the McGill Student Health Services. This card indicates that the student has the necessary inoculations for clinical practice. The card must be presented to the Centre Coordinator of Clinical Education on the first morning of each clinical practice period.

**Failure to complete the required tests before the Clinical Periods:** Student will not be permitted to enter the clinical setting.

**CARDIOPULMONARY RESUSCITATION**

**Before entering the first clinical placement:** It is compulsory that all students have a valid up-to-date CPR certificate. This certification must be maintained over the three years of the program. Without a valid up-to-date CPR certificate, the student will not be permitted to enter the clinical setting. The student is required to present a copy of the certification to the Academic Clinical Coordinator, Professor P. Wells, before the last day of January in the first year of the UI program.

**581-235A - MOVEMENT SCIENCE AND PRACTICE**

**Credits:** 3

**Lecturers:** D. St-Pierre (Coordinator), I. Zompa, E. Aston-McCrimmon, L. Asseraf-Pasin, R. Booninsukh

**COURSE STRUCTURE**

This course is made up of lectures and practicals for 8 to 10 hours a week over 13 weeks.

**GOAL**

The overall goal of the course is to enable the student to design and implement an appropriate exercise program for musculoskeletal impairments, in patients across the life span, based on evidence based practice.

**OBJECTIVES**

1. The student will be able to apply knowledge of the properties of muscle and connective tissue to design a safe exercise program aimed at improving range of motion, flexibility, strength, power, endurance, balance and proprioception.
2. The student will be able to determine the short and long terms goals appropriate for a given case history and to prioritise in order of importance, taking into consideration the functional status, age and lifestyle of the patient.
3. The student will be able to identify which physical modalities would be appropriate to use for a given case history.
4. The student will be able to demonstrate appropriate verbal communication skills with the patient or caregiver in order to:
  - Demonstrate sensitivity to the overall needs of the patient
  - Educate the patient or caregiver
  - Determine with the patient or caregiver the treatment priorities
  - Teach the exercise program
  - Encourage the patient's independence throughout the treatment plan
  - Teach the use of an assistive device
5. The student will be able to demonstrate appropriate manual skills in order to:

- Apply specific techniques to improve range of motion and strength
- Enhance the teaching or effectiveness of an exercise
- Safely assist the patient in lifts and transfers
- Adjust the assistive device

6. The student will be able to document in writing the exercise program.

**PERFORMANCE OBJECTIVE**

The student will be able to demonstrate knowledge and understanding necessary to implement and carry out an age-specific exercise program that meets specific goals.

**CONTENT**

Theory and practice of exercise as a therapeutic agent, including how to move effectively and to teach and exercise, will be explored across the life span. These skills will be integrated with basic concepts of the physiological effects of other physical agents used to enhance movement in patients with musculoskeletal problems.

**Lecture Topics:**

- Determining short and long term goals
  - Reduce pain and swelling
  - Increase or maintain range of motion and flexibility
  - Increase or maintain muscle strength
  - Increase or maintain muscle endurance
  - Increase muscle power
  - Retrain proprioception and balance
  - Retrain gait
- The healing process
- Properties of connective tissue
- Properties of skeletal muscle:
  - Types of muscle contractions
  - Length-tension curve
  - Force-velocity relationship
  - Force-frequency relationship
- Principles of strength training
- Power and endurance training
- Balance and proprioception reeducation
- Posture/back exercises
- Lifts and transfers
- Assistive devices
- Aquatic rehabilitation
- Thermal agents

**Topics of practical classes**

- Range of motion exercises



- Flexibility exercises
- Types of muscle contractions
- Isokinetic exercises
- Strength training
- Power and endurance training
- Balance and proprioception training
- Electrical stimulation
- Thermal agents
- Lifts and transfers
- Assisted-gait
- Posture/back exercises

**REQUIRED TEXTS**

Hall, C.M. and Brody, L.T. (1999) *Therapeutic exercise. Moving toward function*. Lippincott Williams and Wilkins.

Course Pack.

**RECOMMENDED TEXTS**

Duesterhaus Minor, M.A. and Duesterhaus Minor, S.D. ( 1995 ). *Patient Care Skills*. (3<sup>rd</sup> edition). Appleton and Lange.

Michlovitz, S.L. (1996). *Thermal Agents in Rehabilitation*. Third Edition. Davis, F.A.

**N.B. *This course is a pre-requisite to 581-236B (Movement 1 - Musculoskeletal) and to 581-220B (Clinical Affiliation I) offered in the second semester and must be passed prior to entering the clinical rotation.***

**EVALUATION**

Mid-Term Written Examination:	30%
Quizzes/assignments	20%
Final Oral Practical:	50%

**N.B. *The final oral practical exam must be passed with a C<sup>+</sup> or better in order to pass the course.***

**581-236B - MOVEMENT I - MUSCULOSKELETAL**  
**Treatment Procedures for Disorders of the Musculoskeletal System**

**Credits:** 4

**Lecturers:** I. Zompa (Coordinator), E. Aston-McCrimmon, R. Dykes, M. Visintin, Guest Lecturers

**COURSE STRUCTURE**

This course is comprised of five sections, two of which (Sections A and E) are combined with the Occupational Therapy course 580-236B:

<b>Section A:</b>	Histopathology/Pharmacology/Conditions
<b>Section B:</b>	Musculoskeletal System-Extremities
<b>Section C:</b>	Rheumatology
<b>Section D:</b>	Prosthetic Management
<b>Section E:</b>	Integrative/Reflective Approach to Management of Musculoskeletal Disorders

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**SECTION A: CONDITIONS, PATHOLOGY, HISTOLOGY AND PHARMACOLOGY**

**Lecturers:** I. Zompa (Co-coordinator), N. Gervais (Co-coordinator), B. Nedelec

**COURSE STRUCTURE**

Conditions:	Fourteen 1½ -hour lectures
Histology:	Three 2-hour lectures
Pathology:	One 2-hour lecture
Pharmacy:	One 2-hour lecture
Wound Healing:	One 2-hour lecture

**LEARNING OUTCOMES**

On completion of this course, the student will be able to:

1. describe the disorders of the musculoskeletal system, in terms of etiology, pathology and signs and symptoms of various orthopaedic conditions.
2. describe the structure of normal tissue in the musculoskeletal system, and the basic pathological changes that occur in orthopaedic conditions.
3. identify and describe the basic actions of pharmaceutical agents used in the treatment of orthopaedic conditions, be aware of their implications to therapeutic intervention and have obtained the skills for self-directed exploration of those pharmaceutical agents which are encountered in clinical practice.
4. demonstrate that reading material is prepared prior to attending the corresponding lectures.

**COURSE CONTENT**

These lectures will cover the cellular composition of body tissues and their response to injury, as well as the diseases' processes in various musculoskeletal conditions.

This course follows a guest lecturer format, whereby physicians and clinicians present on a variety of orthopaedic conditions, as well as on the topics of pathology, histology, wound healing and pharmacology.

**REQUIRED TEXTS**

Steinberg, G.G., Akins, C.M. and Baran, D.T. (1999). *Orthopaedics in Primary Care*, (3<sup>rd</sup> edition). Published by Lippincott, Williams and Wilkins.

**RECOMMENDED TEXT**

Salter, R.B. (1999). *Textbook of Disorders and Injuries of the Musculoskeletal System*. (3<sup>rd</sup> edition). Baltimore, Maryland, Williams and Wilkins.

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**SECTION B: MUSCULOSKELETAL SYSTEM-EXTREMITIES**

**Lecturer:** I. Zompa

**STRUCTURE**

Two 3½-hour lectures/practicals per week for 8 weeks.

**GOAL**

The overall goal of this section is to present a comprehensive approach to the management of surgical and non-surgical musculoskeletal problems of the upper and lower extremities. In order to facilitate the achievement of this goal, students are provided with additional readings and are presented with patients undergoing treatment.

**OBJECTIVES**

On completion of this course, the student shall be able to:

1. develop an appropriate orthopaedic assessment and treatment plan for a given patient by integrating the knowledge learned in Movement Science and Practice 581-235A, Assessment in Rehabilitation 582-239A and Anatomy 504-315A.
2. discuss a variety of musculoskeletal pathologies related to the extremities.
3. define the role and responsibility of physical therapists in order to determine when a referral to other health professionals is indicated.
4. recognize the roles of other health professionals in the management of musculoskeletal conditions.

5. further develop accurate assessment techniques and a sound interpretation of the results of these assessments.
6. critically evaluate a number of case studies in order to design appropriate Physical Therapy management including home programs, accurate documentation of assessment results, goals, treatment plans, expected outcomes and patient/family education as indicated.

**PERFORMANCE OBJECTIVES**

The student will demonstrate knowledge and understanding of the concepts, skills and professional behaviors required to effectively and safely perform musculoskeletal assessments, treatments and evaluations of patients' outcomes.

**KNOWLEDGE**

The student shall be able to:

1. describe the osteokinematics and arthrokinematics of normal joint movement and how abnormal movement can influence treatment selection and outcome.
2. outline the process of soft tissue healing and how these stages of healing influence treatment selection and outcomes.
3. explain the effect of immobilization on tissue healing and its effect on Physical Therapy management.
4. describe the theory and basic principles of musculoskeletal assessment as it applies to children and adults of all ages.
5. explain the rationale for repeated assessment and treatment.
6. describe how pain affects assessment, treatment selection and outcome.
7. analyse musculoskeletal deformities, their causes and how they influence treatment selection and outcome.
8. interpret upper and lower extremity peripheral nerve entrapments/injuries and their clinical presentations.
9. recognize the frequently used medical and surgical interventions for common musculoskeletal disorders and their rehabilitation protocols.
10. describe the measurement and treatment concepts related to reliable and valid diagnoses, prognoses and evaluation.
11. recount concepts related to critical appraisal of the evidence for effectiveness of treatment interventions.
12. describe treatment strategies to improve and/or maintain:
  - range of motion
  - strength
  - irritability/pain
  - joint mobility

- swelling
  - posture
  - gait
  - muscle atrophy
  - balance/proprioception
  - function/ADL
  - abnormal sensation
13. apply the concept of differential diagnoses of common musculoskeletal disorders across the life span in terms of their pathology, cause, clinical presentation and treatment management.

**SKILLS**

The student shall be able to:

1. communicate in a professional manner given the psychological, cognitive, social and cultural factors which might influence communication.
2. elicit and accurately record a patient's pertinent history.
3. determine from the subjective assessment whether a referral to other health professionals is indicated.
4. select and perform safe and effective assessment skills using appropriate body mechanics and grip. Emphasis is on safety and comfort. These include:
  - posture
  - gait
  - balance
  - skin status
  - bony and soft tissue contours
  - functional movements
  - active ROM
  - passive ROM
  - resisted movements
  - special tests
  - neurological testing - dermatomes/myotomes
  - joint play movements
  - palpation - swelling/warmth/tenderness/skin texture
5. read and document using the SOAP system.
6. determine the patient's level of irritability from the subjective assessment prior to the objective assessment.
7. analyse and interpret assessment findings to properly identify the problems.
8. identify joint restrictions, abnormal end feels and the relationship between pain, resistance/spasm in a musculoskeletal population.
9. select, apply and re-evaluate safe and effective treatment techniques in the following areas. Emphasis is on safety and comfort. These include:
  - postural correction

- gait correction
  - active/passive movements
  - joint mobilizations
  - some taping
  - therapeutic exercise - isometric/concentric/eccentric/closed-open kinetic chain
10. consistently demonstrate safe handling.
  11. consistently demonstrate good body mechanics.
  12. recognize, treat and assess movement dysfunction.
  13. plan, deliver progress and re-evaluate treatment effectiveness.
  14. formulate a complete and comprehensive problem list in order of priority.
  15. establish realistic short and long term goals.
  16. plan and implement an appropriate treatment approach.
  17. determine and select the appropriate treatment tools.
  18. demonstrate effective patient and family education skills.
  19. instruct patients in lifestyle management which may be directly or indirectly adverse to the patient.
  20. evaluate treatment outcomes.
  21. review patient goals.
  22. estimate predictive outcomes.
  23. plan patient discharge.

**PROFESSIONAL BEHAVIORS**

The student will:

1. establish rapport with peers/instructors who act as the simulated patients, using appropriate interviewing, interpersonal and treatment skills in a professional manner.
2. assume responsibility of self-learning, including the searching for readings and other learning resources in preparation for classes.
3. assume full responsibility for professional behaviour.
4. respect self, peers and faculty.
5. demonstrate basic team/group building behaviours.

6. demonstrate ability to work effectively in pairs, small groups and the entire group at large.
7. participate actively in small group discussions.
8. acknowledge the contribution of other members in a large group.
9. evaluate constructively self, and small group members during problem-based discussions, practice sessions and peer demonstrations.
10. be receptive to constructive feedback from peers and faculty.
11. complete all assignments.

**TEACHING METHODS**

- Mini lectures
  - Supervised practise
  - Role play/patient simulation
  - Small group work
  - Case studies
  - Patient presentations from affiliated clinics
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**REQUIRED TEXTS**

Steinberg, G.G., Akins, C.M. and Baran, D.T. (1999). *Orthopaedics in Primary Care*, (3<sup>rd</sup> edition). Published by Lippincott, Williams and Wilkins.

Hall, C.M. and Brody, L.T. (1999). *Therapeutic Exercise: moving toward function*, (1<sup>st</sup> edition). Published by Lippincott, Williams and Wilkins.

Course Pack.

**SECTION C: RHEUMATOLOGY**

**Lecturer:** M. Visintin

**STRUCTURE**

One 2-hour lecture/seminar/laboratory session per week for seven weeks.

**OBJECTIVES**

Given a case history of a rheumatic disease, the student shall be able to:

1. describe the assessment procedures for the patient.
2. demonstrate an assessment that is realistic for the case.
3. state long and short term treatment goals.

4. describe a treatment program for the case that meets the goals.
5. demonstrate treatment procedures on a rheumatic patient (or model).

### **CONTENT**

The following aspects of the rheumatic diseases will be covered:

- C Assessment of patients
  - C Aims of treatment
  - C Methods of treatment
  - C Use of splints, support and aids.
  - C Education of the patient
  - C Activities of daily living
  - C Home programs
  - C The total physiotherapy program - part of the patient's total treatment program.
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### **REQUIRED TEXT**

Primer on the Rheumatic Disease - Committee of the American Rheumatism Association, Section of the Arthritis Foundation.

Readings for Rheumatology lectures will be assigned from the Arthritis Canada web site address:  
<http://www.arthritis.ca/new.html>.

## **SECTION D: PROSTHETIC MANAGEMENT**

**Lecturer:** E. Aston-McCrimmon

### **STRUCTURE**

Two 2-hour lectures and 1-hour practical per week for the first four weeks of term, plus a clinical visit.

### **GOAL**

The goal of this section is to give students an overall approach to the rehabilitation management of amputees. This rehabilitation process is geared to improving function and quality of life throughout the life span.

### **OBJECTIVES**

On completion of this course, the student will be able to:

1. describe the etiology and clinical features that may lead to amputations.
2. develop an assessment plan for the amputee based on age and cause.
3. develop a management program for amputees based on age, conditions and cause.



4. have an understanding and appreciation of the psychological impact which results after amputation depending on age and cause.
5. discuss the role, responsibility and limitations of the physical therapist in the evaluation and rehabilitation of the amputee in the use of a prosthesis.
6. describe and discuss the components and basic principles involved in upper and lower prostheses and orthoses with emphasis on lower extremity prostheses.
7. describe the role of the physical therapist in relation to the multidisciplinary team in total amputee patient management.
8. given a real or simulated situation be able to:
  - a) evaluate the amputee, pre-operatively, post-operatively, preprosthetically and with the prosthesis
  - b) select and teach therapeutic exercises for the amputee in all stages of management
  - c) use and apply stump bandages to the patient and instruct the patient accordingly
9. evaluate the fit, alignment, appropriateness and use of prostheses.
10. instruct the amputee in gait training and use of the prosthesis in activities of daily living.

**CONTENT**

- C Pre- and post-surgical evaluation of the patient.
- C Pre- and post-operative management of amputees.
- C Pre-prosthetic and prosthetic training for amputees.
- C Components of prostheses and biomechanical principles.
- C Normal gait and gait deviations.
- C Gait training activities.
- C Dressings.

**REQUIRED TEXTS**

Bella J. May. *Amputations and Prosthetics - A Case Study Approach*. F.A. Davis Co.

O'Sullivan, S. & Schmitz, T. *Physical Rehabilitation: Assessment and Treatment*, (3<sup>rd</sup> edition). F.A. Davis Co.

**REFERENCE MATERIAL**

Lower-limb Prosthetics, 1998 revision - New York University Medical Center.

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**SECTION E: INTEGRATIVE/REFLECTIVE APPROACH TO MANAGEMENT OF  
MUSCULOSKELETAL DISORDERS**

**Lecturers:** S. Beaulieu (Co-coordinator), I. Zompa (Co-coordinator), N. Gervais

**COURSE STRUCTURE**

This course will consist of 3½ hours of seminar, 3 days per week for a period of 3 weeks.

**OVERALL OBJECTIVE**

Occupational and physical therapy students will work together to apply knowledge acquired in musculoskeletal courses to manage client cases.

**COURSE OBJECTIVES**

At the end of this course, the student will:

- S** demonstrate the use of the client-centred approach in case managements.
- S** demonstrate communication skills required for taking a history, assessing and treating clients (for example, instructing patients). They will be attentive to clients, and they will demonstrate empathy and interest when interacting with them (in addition see History Taking Checklist handout provided in Assessment in Rehabilitation I).
- S** identify the other allied health professionals involved in a client's care.
- S** summarize and prioritize aspects of a case (for example, medical history), eliminating duplication, minimizing overlap and favouring complementarity.
- S** report verbally, clearly and coherently, the various aspects of the client's case, all the while maintaining a professional demeanour.
- S** identify the strengths and weaknesses of group reports given by fellow students and by themselves.

**COURSE EVALUATION****Section A**

Conditions: Short answer quizzes	10%
Pathology, Histology and Pharmacology: Multiple Choice Exam	10%

**Sections B**

Practical Examination during the examination week	25%
Written Mid-Term Examination	15%

**Section C**

Written Examination	10%
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**Section D**

Project	10%
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**Section E**

Upon completion of the integration block, each student will complete a comprehensive practical examination. The grade received in this section will complete the total mark for the courses **580-236B/581-236B**. Students **must** pass each section of this course prior to receiving their final course mark.

In Occupational Therapy: 580-236B OT Practice I: Musculoskeletal 20%

In Physical Therapy: 581-236B Movement I: Musculoskeletal \_\_\_\_\_

**TOTAL** 100%

**581-241B - ASSESSMENT II: MUSCULOSKELETAL**

**Credits:** 2

**Lecturers:** J.P. Dumas

**COURSE STRUCTURE**

This course will consist of 3-hour lecture/seminars or 2½-hour practical sessions per week for ten weeks starting Monday, January 8, 2001 from 9:30 a.m. to 2:00 p.m. as scheduled.

**OVERALL GOAL**

This is the first of three (2 credit) Peripheral and Vertebral Manual Therapy courses given over the three years of the program. Successful completion of this series qualifies the student to take the E1/V1 examination given by the Ordre professionnel des physiothérapeutes du Québec.

**OBJECTIVES**

A seminar and practical course which focuses on the soft tissue diagnoses of musculoskeletal disorders. The student will acquire the beginning-level knowledge and skills necessary to:

1. perform a subjective evaluation in a professional manner to identify the nature, the severity and the irritability of the patient's condition;
2. recognize the suitability of a patient for manual therapy treatments with proper knowledge of contraindications or precautions to be taken to pursue with the objective examination;
3. perform an orthopaedic objective examination of peripheral joints in a concise and organized manner including observation, active, passive, resisted movements, ligaments stress tests, neurological examination if applicable and neural tension test;
4. improve one's manual dexterity with surface anatomy of peripheral joints through practice of soft tissue palpation and use of anatomical theoretical knowledge and relationships;
5. analyse the data gathered through the evaluation and recognize the manifestations of different pathologies and rule out different conditions throughout the objective evaluation;
6. determine the proper treatment procedure and re-evaluation after each technique to verify its effect and pertinence.

**REQUIRED TEXT**

Class Notes at a cost of approximately \$15.

**EVALUATION**

Written and practical examination to be given during the week of March 12-16, 2001.