Master of Physical Therapy Program: Year 1
ORTHO COURSE OUTLINES

Course: PT 6124 - Physical Therapy and Hospital-based Care

COURSE DESCRIPTION:

Through lecture, tutorial and laboratory sessions, students learn the role of physical therapy in Hospital-based care across the lifespan. Students will learn knowledge, skills, and behaviors which support physical therapy assessment and treatment skills

COURSE OVERVIEW:

Class work includes lectures involving in-class small group work and tutorial sessions involving small and large group work. Clinical skills are taught in laboratories by faculty instructors where the students themselves will act as practice patients. For some of the laboratory sessions, students will practice their clinical skills on standardized clients and model patients to assist learning communication and safe handling skills. Standardized clients are individuals who portray a scripted role. Model patients are individuals who have a particular health condition amenable to physiotherapy assessment and treatment. Students are expected to: prepare for learning activities by completing the required readings and reviewing instructional DVD's; engage in independent practice of clinical skills where self and peer evaluation occurs to support learning; integrate information learned from previous learning; and apply components of the *Department of Physical Therapy Conceptual Framework* to learning sessions.

COURSE OBJECTIVES:

This course focuses on specific cognitive, psychomotor and affective physical therapy skills. Upon successful completion of the course students will be able to:

Describe the physiotherapy role of *Expert* in assessing and treating dysfunction in the Pre-hab (pre-surgery), Emergency Room and Hospital settings;

- Reflect on experiences and observations associated with the hospital clinical visit;
- Describe selected NMSK elective and traumatic surgical procedures in adult and pediatric clients including medications, dressings, and lines and tubes;
- Summarize the acute effects and common post-operative complications of surgery, medication and physical inactivity on all body systems in adult and pediatric clients;
- Demonstrate proficiency in performing an assessment (subjective and objective examination) on the orthopedic pre-operative outpatient and post-operative inpatient, and the amputee patient;
- Determine the client's prognosis based on their diagnosis and be able to select applicable assessment and treatment strategies (e.g. including outcome measures, self-management, education, exercise, supportive devices, and other);
- Demonstrate proficiency in performing treatments for the orthopedic pre-operative outpatient and post-operative inpatient, and the amputee patient in order to prevent complications and restore/maximize function;
- Incorporate relevant community resources as part of the discharge planning discussion;
- Incorporate Interprofessional knowledge, as appropriate, to identify communication and collaboration with other members of the health care team;
- Synthesize clinical information using the *Clinical Decision Making Process* when discussing clinical cases and when engaging with model patients;
- Demonstrate professional behaviour and respectful communication with participants in all educational activities; and
- Self-assess knowledge, skills, behaviors and attitudes during learning sessions;

Demonstrate professional and academic integrity;

- Demonstrate team work for group activities;
- Incorporate *Patient Safety Competencies* in all relevant learning activities.

COURSE RESOURCES:

REQUIRED TEXTBOOKS / READINGS:

1. Paz, JC & West, WP (2014). Acute care handbook for Physical Therapists (4th Ed.) Elsevier: St. Louis.
2. Clinical Keys: https://www-clinicalkey-com.proxy2.lib.umanitoba.ca/Goodman, C.C. Fuller, K. (2009). Pathology: Implications for the Physical Therapist. Saunders, (3rded.).

RECOMMENDED TEXTBOOKS

1. Goodman, C.C. Fuller, K. (2015). Pathology: Implications for the Physical Therapist (4th Ed.). Elsevier: St. Louis.
2. Fairchild, S.L. (2013). Pierson and Fairchild's Principles & techniques of patient care (5th Ed.) St. Louise, Missouri: Saunders (Elsevier).

Course: PT 6221 - Clinical Skills for Physical Therapy in Neuromusculoskeletal Conditions 1

COURSE DESCRIPTION:

Through lecture, tutorial and laboratory sessions, students apply physical therapy assessment, diagnostic and treatment skills for upper quadrant Neuromusculoskeletal conditions across the lifespan.

COURSE OVERVIEW:

This course involves class, lab and tutorial work; students are expected to prepare for each activity by completing the required readings for lectures, tutorials and the assigned skills laboratories as well as review any instructional DVD's. Class work includes lectures, in-class small group work, and tutorial sessions. Clinical skills are taught in laboratories by either faculty or a peer coach. Students will integrate content from PT 6140 (Anatomy) and PT 6230.

COURSE OBJECTIVES:

Upon successful completion of this course students should be able to:

1. Demonstrate professional behaviour and respectful communication with participants in all educational activities
2. Self-assess knowledge, skills, behaviors and attitudes during learning sessions;
3. Demonstrate professional and academic integrity
4. Demonstrate team work for group activities;
5. Incorporate Patient Safety Competencies in all relevant learning activities.
6. Apply the conceptual framework;
7. Demonstrate proficiency in performing a subjective and objective examination on the cervical/thoracic spine, shoulder girdle, elbow, wrist and hand;
8. Determine the physiotherapy diagnosis and be able to select applicable assessment strategies for upper quadrant NMSK indicator conditions;
9. Demonstrate proficiency in performing selected treatment interventions for the cervical/thoracic spine, shoulder girdle, elbow, wrist and hand;
10. Explain the principles of PT intervention and the rationale for selecting specific treatments for upper quadrant NMSK indicator conditions across the lifespan;
11. Provide education / feedback to standardized client/ peers.

COURSE RESOURCES:

REQUIRED TEXTBOOKS / READINGS:

1. Magee, D.J. 2008. Orthopedic Physical Assessment (5th Ed.). Philadelphia: Saunders
2. Whitmore, S. (Ed.). (2008). Upper Quadrant Workbook of Manual Therapy. (2nd Ed.)
3. Kisner, C. & Colby, L.A. (2007) Therapeutic exercise: Foundations and techniques. (5th Ed.). Philadelphia, PA: F.A. Davis Company.
4. Clarkson, H.M. 2000. Musculoskeletal Assessment: Joint Range of Motion (2nd Ed.). Philadelphia: Lippincott Williams & Wilkins.

Course: PT 6222 - Clinical Skills for Physical Therapy in Neuromusculoskeletal Conditions 2

COURSE DESCRIPTION:

Through lecture, tutorial and laboratory sessions, students apply physical therapy assessment, diagnostic and treatment skills for lower quadrant Neuromusculoskeletal conditions across the lifespan.

COURSE OVERVIEW:

This course involves class, lab and tutorial work; students are expected to prepare for each activity by completing the required readings for lectures, tutorials and the assigned skills laboratories as well as review any instructional DVD's. Class work includes lectures, in-class small group work, and tutorial sessions. Clinical skills are taught in laboratories by either faculty or a peer coach. Students will integrate content from PT 6140 (Anatomy) PT 6221 and PT 6230.

COURSE OBJECTIVES:

Upon successful completion of this course students should be able to:

1. Demonstrate professional behaviour and respectful communication with participants in all educational activities;
2. Self-assess knowledge, skills, behaviors and attitudes during learning sessions;
3. Demonstrate professional and academic integrity
4. Demonstrate team work for group activities;
5. Incorporate Patient Safety Competencies in all relevant learning activities.
6. Apply the conceptual framework;
7. Demonstrate proficiency in performing a subjective and objective examination on the lumbar spine, pelvis, hip, knee, foot and ankle (including gait);
8. Determine the physiotherapy diagnosis and be able to select applicable assessment strategies for lower quadrant NMSK indicator conditions;
9. Demonstrate proficiency in performing selected treatment interventions for the lumbar spine, pelvis, hip, knee, foot and ankle;
10. Explain the principles of PT intervention and the rationale for selecting specific treatments for lower quadrant NMSK indicator conditions across the lifespan;
11. Provide education / feedback to standardized client/ peers.

COURSE RESOURCES:

REQUIRED TEXTBOOKS / READINGS:

1. Magee, D.J. 2008. Orthopedic Physical Assessment (5th Ed.). Philadelphia: Saunders
2. Whitmore, S., Gladney, K. & Driver, A. (2007). Lower Quadrant Workbook of Manual Therapy Techniques. (2nd Ed.)
3. Kisner, C. & Colby, L.A. (2007) Therapeutic exercise: Foundations and techniques. (5th Ed.). Philadelphia, PA: F.A. Davis Company.

4. Clarkson, H.M. 2000. Musculoskeletal Assessment: Joint Range of Motion (2nd Ed.). Philadelphia: Lippincott Williams & Wilkins.

Course: PT 6230 - Applied Sciences for Physical Therapy 2

COURSE DESCRIPTION:

Through lecture, tutorial and laboratory sessions, students will learn the application of anatomy, biomechanics, physiology, pathology and exercise to the neuromusculoskeletal system. Scientific and medical theoretical basis for physical therapy intervention will be covered.

COURSE OVERVIEW:

This course involves class, lab and tutorial work; students are expected to prepare for each activity by completing the required readings for lectures, tutorials and the assigned skills laboratories. Class work includes lectures, in-class small group work, and tutorial sessions. Clinical skills are taught in laboratories by either faculty or peer coach.

COURSE OBJECTIVES:

Upon successful completion of this course students will be able to:

1. Demonstrate professional behaviour and respectful communication with participants in all educational activities
2. Self-assess knowledge, skills, behaviors and attitudes during learning sessions;
3. Demonstrate professional and academic integrity
4. Demonstrate team work for group activities;
5. Incorporate Patient Safety Competencies in all relevant learning activities.
6. Recognize principles of disease and injury prevention, including risk factor identification.
7. Assess and describe soft tissue healing.
8. Demonstrate thorough knowledge and understanding of the following key indicator conditions* and describe the selection and implementation of medical, surgical and other non-PT management strategies for these conditions:
   a. Cancer
   b. Chronic pain
   c. Degenerative disorders
   d. Fractures and joint injuries
   e. Lower and upper quadrant musculoskeletal disorders of the spine, shoulder, elbow, wrist, hand, hip knee, ankle and foot.
   f. Mental health conditions
   g. Muscle and ligament injuries
   h. Osteoporosis
   i. Peripheral neuropathies
   j. Rheumatic disorders
9. List the principles of diagnostic imaging, identify various equipment used for imaging and gain exposure to viewing images.
10. Identify the mechanism, actions and therapeutic dosages of common pharmacological agents used with NMSK conditions.
11. Classify the properties, therapeutic and physiological effects, indications, contraindications and precautions of electrophysical agents (EPA) used in physical therapy practice. EPAs include heat, cold, hydrotherapy, ultrasound, electrical stimulation, LASER and UVL.
12. Apply electrophysical agents safely and effectively

COURSE RESOURCES:

REQUIRED TEXTBOOKS / READINGS:

1. Belanger, A. (2014). Therapeutic Electrophysical Agent(s): Evidence Behind Practice. (3rd Ed.) Lippincott, Williams and Wilkins.
2. Goodman, C. & Fuller, K. (2009) Pathology – Implications for the Physical Therapist. (3rd Ed.) St. Louis, Missouri: Saunders.
3. Effgen, S. (2013). Meeting the Physical Therapy Needs of Children. Philadelphia: FA Davis.

RECOMMENDED TEXTBOOKS

1. Magee, D., Zachazewski, J. & Quillen, W. (2009) Pathology and Intervention in Musculoskeletal Rehabilitation. St. Louis Missouris: Saunders.
