



**I. COURSE DESCRIPTION:**

The purpose of this course is to introduce the student to common disabling conditions which are managed by occupational therapists and physiotherapists. The conditions emphasized will be musculoskeletal in nature. Relevant anatomy/physiology will be reviewed and/or taught prior to the student gaining familiarity with the conditions, the associated pathology, the course of the condition and the intervention provided by a Physiotherapist and/or Occupational Therapist. The student will be able to recognize the clinical presentation of the specific conditions covered in the class.

**II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:**

Upon successful completion of this course, the student will:

- 1. Demonstrate a general knowledge of the basic concepts of relevant anatomy and physiology, pathophysiology and the general principles of disease and injury.**

Potential Elements of the Performance:

- Describe the general principles of disease and injury (alterations in cell function, structure, growth and differentiation; inflammation, wound healing and neoplasia) sufficient to understand the pathophysiology of the conditions covered
- Identify and state the function of the major parts of the Central Nervous System, Peripheral Nervous System, Musculoskeletal System, and the Integumentary System sufficient to understand the pathophysiology of the conditions covered

- 2. Demonstrate an understanding of common conditions, including the etiology, pathophysiology, and clinical presentation.**

Potential Elements of the Performance:

- Describe the following conditions including the etiology, pathophysiology and clinical presentation:

**Pain:**

Acute, chronic, referred

**Musculoskeletal System**

Fibromyalgia

Polymyositis

Spinal Disorders – Herniated Intervertebral Disk, Degenerative Disc

Disease Scoliosis, Kyphosis

Osteoarthritis

Bursitis

Osteomyelitis

Gout

Musculoskeletal Tumors

Osteoporosis

Osteomalacia and Rickets

Hallux Valgus, Hallux Rigidus, Hammer Toe

Traumatic and Sports Injuries

Fractures  
Sprains and Strains  
Dislocations, Subluxations  
Adhesive Capsulitis (Frozen Shoulder)  
Severed Tendon, Tendonitis  
Contusion  
Shin Splints  
Plantar Fasciitis  
Ganglion  
Torn Meniscus  
Rotator Cuff Tears  
Amputations  
Congenital Anomalies  
Hip dysplasia  
Legg-Calve-Perthes  
Angular/Torsional Conditiions – genu varum, genu valgum, torticollis  
Other Connective Tissue Disorders  
Ankylosing spondylitis  
Infectious arthritis  
Psoriatic arthritis  
Hypermobility disorders  
Osteochondritis (Osgood-Schlatter's, Scheuermann's Disease)  
Osteonecrosis  
Bone Neoplasms  
Benign, malignant  
Ewing's sarcoma  
Secondary bone tumors  
**Integumentary System (Skin)**  
Dermatitis  
Psoriasis  
Herpes zoster (shingles)  
Furuncles and carbuncles  
Cellulitis  
Dermatophytoses (tinea capitis, tinea corporis, tinea unguium, tinea  
Pedis, tinea cruris)  
Decubitus ulcers  
Benign and premalignant tumors  
Skin carcinomas  
Abnormal skin pigmentation  
Alopecia  
Folliculitis  
Corns and calluses  
Verrucae (warts)  
Deformed or Discoloured Nails  
Trauma – abrasions, avulsion, puncture wounds, lacerations  
Thermal Insults – burns, hyperthermia, hypothermia, frostbite

**3. Demonstrate knowledge of the clinical implications of these conditions.**

Potential Elements of the Performance:

- For each of the conditions listed above, where appropriate, explain the effect of the condition on normal growth and development and/or the aging process
- For each of the conditions listed above, where appropriate, assess and interpret the effect of the condition on the physical, psychosocial and environmental aspects of an individual's life
- Integrate knowledge of each condition with the impact of the condition on the client's normal function and his/her environment

**4. Demonstrate knowledge of the general goals of treatment as outlined by the OT/PT as they relate to each condition.**

Potential Elements of the Performance:

- Describe treatment for each of the conditions listed above
- Describe the general goals of treatment by an OT/PT for each of the conditions listed above

**5. Demonstrate an understanding of the specific role of the OTA/PTA in carrying out the treatment plan established by the OT/PT in each condition.**

Potential Elements of the Performance:

- Describe the role of the OTA/PTA in the OT/PT management of each of the conditions listed above

**III. TOPICS:**

1. Basic concepts of disease and injury
2. Anatomy and Physiology of the Nervous System
3. Pathophysiology of Neurological Conditions  
Pain: Acute, Chronic and Referred
4. Anatomy and Physiology of the Musculoskeletal System
5. Pathophysiology of the Musculoskeletal System
6. Anatomy and Physiology of the Integumentary System
7. Pathophysiology of the Integumentary System
8. Clinical Implications
9. Treatment Goals
10. Role of the OT/PT and OTA/PTA in each condition  
Sports Injuries and Management

**IV. REQUIRED RESOURCES/TEXTS/MATERIALS:**

Frazier, M and Drzymkowski, J. (2000). Essentials of Human Diseases and Conditions (2<sup>nd</sup> ed.), W.B. Saunders Company

Garrison, S. (2003). Handbook of Physical Medicine and Rehabilitation Basics. (2<sup>nd</sup> ed.) Lippincott-Raven

**V. EVALUATION PROCESS/GRADING SYSTEM:**

**Students in the OTA/PTA program must successfully complete this course with a minimum C grade (60%) as partial fulfillment of the OTA/PTA diploma.**

A combination of tests and assignments will be used to evaluate student achievement of the course objectives. A description of the evaluation methods follows and will be discussed by the teacher within the first two weeks of class.

|                           |     |
|---------------------------|-----|
| 7 Quizzes (worth 5% each) | 35% |
| 3 Tests (worth 15% each)  | 45% |
| Attendance/Homework       | 5%  |
| Final Written Exam        | 15% |

1. All tests/exams are the property of Sault College.
2. Students missing any of the tests or exams because of illness or other serious reason must notify the professor **BEFORE** the test or exam. The professor reserves the right to request documents to support the student's request.
3. Those students who have notified the professor of their absence that day will be eligible to arrange an opportunity as soon as possible to write the test or exam at another time. Those students who **DO NOT NOTIFY** the professor will receive a zero for that test or exam.
4. For assignments to be handed in, the policies of the program will be followed. For assignments not handed in by the due date, the mark received will be zero. Extensions will be granted if requested in writing at least 24 hours before the due date. There will be a deduction of one percent (of final grade) per day for every school day late with the permission of an extension. This means that an extension for 5 school days (1 week), will result in 5 percentage points deducted from the final grade.

The following semester grades will be assigned to students in post-secondary courses:

| <u>Grade</u> | <u>Definition</u> | <u>Grade Point Equivalent</u> |
|--------------|-------------------|-------------------------------|
| A+           | 90 – 100%         | 4.00                          |
| A            | 80 – 89%          |                               |
| B            | 70 - 79%          | 3.00                          |
| C            | 60 - 69%          | 2.00                          |
| D            | 50 – 59%          | 1.00                          |
| F (Fail)     | 49% and below     | 0.00                          |

|             |  |
|-------------|--|
| CR (Credit) | Credit for diploma requirements has been awarded.  |
| S           | Satisfactory achievement in field /clinical placement or non-graded subject area.  |
| U           | Unsatisfactory achievement in field/clinical placement or non-graded subject area.   |
| X           | A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course. |
| NR          | Grade not reported to Registrar's office.  |
| W           | Student has withdrawn from the course without academic penalty.  |

***NOTE: Mid Term grades are provided in theory classes and clinical/field placement experiences. Students are notified that the midterm grade is an interim grade and is subject to change.***

**Note:** For such reasons as program certification or program articulation, certain courses require minimums of greater than 50% and/or have mandatory components to achieve a passing grade.

It is also important to note, that the minimum overall GPA required in order to graduate from a Sault College program remains 2.0.

#### **VI. SPECIAL NOTES:**

Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session. *It is the departmental policy that once the classroom door has been closed, the learning process has begun. Late arrivers will not be guaranteed admission to the room.*

#### **VII. COURSE OUTLINE ADDENDUM:**

The provisions contained in the addendum located on the portal form part of this course outline.