

I. COURSE DESCRIPTION:

The purpose of this course is to provide the student with basic skills performed by an OTA. The emphasis will be on the management of musculoskeletal conditions, particularly the use of assistive devices, splints and computers used to maximize independent function. Lab sessions will familiarize students with the array of potential supplies, their correct use and application and the safe fabrication and application of these devices. The student will gain the necessary skills to assist in the construction of assistive devices and splints as directed by an Occupational Therapist. In addition, the application of joint range of motion and muscle strength, joint protection and work simplification will be covered. The student will become familiar with ADL/IADL considerations, accessibility issues and vocational rehabilitation.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

In general, this course addresses Learning Outcomes of the Program Standards in: communication skills (1,2,8O – 12O), interpersonal skills (1,2,7,9O –12O), safety (1,2,4,8O – 12O), professional competence (1,2,4,5,6,8O -12O), documentation skills (1,4,5) and application skills (1,2,4,8O – 12O). It addresses all of the Generic Skills Learning Outcomes.

Upon successful completion of this course, the student will:

1. **Demonstrate an understanding of the clinical presentation of common musculoskeletal conditions managed in an Occupational Therapy setting.**

Potential Elements of the Performance:

- Review measures of burn injury severity, medical management for different types of **burns** and issues related to scar management
- Review common causes and types of **acute hand injuries**, postoperative complications and the role of rehabilitation in maximizing functional ability of the hand
- Describe major **arthritic diseases** and discuss common signs and symptoms, challenges with ADL and effective treatment interventions
- Review common **lower extremity fractures and joint arthroplasty** and discuss the role of rehabilitation in helping the client regain independence in ADL
- Discuss the various types and levels of **amputations**, postoperative complications and the role of rehabilitation in helping the client regain functional independence in ADL
- Discuss causes, signs and symptoms associated with **back and neck injuries**
- Discuss the psychosocial aspect of physical dysfunction

2. Demonstrate an understanding of the role of the OT and the OTA in the Occupational Therapy management of common musculoskeletal conditions.

Potential Elements of the Performance:

- Discuss assessments related to the following conditions
- Describe interventions provided by the OT and the OTA:
 - **Burns**-wound management, prevention of deformities, maintenance of ROM and ADL training
 - **Acute Hand Injuries**-splinting following surgical intervention or acute injury , the use of modalities, evaluation of function, exercises and ADL training
 - **Arthritis**-joint protection techniques, splinting, modalities, exercises
 - **Joint Arthroplasty**-contraindications and precautions
 - **Amputations**-education regarding phantom pain, training in the use of prosthetics, ADL training
 - **Back and Neck Injuries**-pain management, training in the use of assistive devices

3. Demonstrate skill in the education/instruction of ADL in clients with specific musculoskeletal conditions.

Potential Elements of the Performance:

- Demonstrate the ability to provide training in the areas of ADL to ensure maximum functioning
- Demonstrate confidence and skill in the training in the use of assistive devices
- Demonstrate the ability to teach clients new methods for performing ADL tasks with the use of prosthetics
- Demonstrate the ability to teach a client how to mobilize in a wheelchair

4. Demonstrate safe and appropriate handling skills in specific musculoskeletal conditions.

Potential Elements of the Performance:

- Discuss specific handling, positioning and transferring principles related to musculoskeletal conditions such as:
 - **burns**
 - **joint arthroplasty**
 - **amputations**
- Describe and practice handling, positioning and transferring techniques

5. Demonstrate an understanding and application of basic energy conservation and joint protection principles to ADLs and IADLs in clients with specific musculoskeletal conditions.

Potential Elements of the Performance:

- Review principles of energy conservation and work simplification as discussed in Semester II
- Review principles of joint protection
- Apply these principles to specific conditions, including arthritis, back injuries, amputations and joint arthroplasty
- Review the role of assistive devices/adaptive equipment in conserving energy

6. Demonstrate knowledge and skill in the selection and implementation of therapeutic activities for individual clients and groups of clients with musculoskeletal conditions under the supervision of an Occupational Therapist.

Potential Elements of the Performance:

- Demonstrate knowledge and skill related to the assessment and intervention of joint range of motion and muscle strength
- Demonstrate the ability to select and adapt treatment strategies and the ability to safely implement these strategies
- Demonstrate the ability to effectively grade activities to meet the client's abilities and enhance continued progression
- Discuss remedial vs. compensatory training for individuals with musculoskeletal disorders
- Define and discuss "Vocational Rehabilitation"

7. Demonstrate skill in observing and reporting any changes in client's progress to the Occupational Therapist.

Potential Elements of the Performance:

- Review the use of checklists and charting systems used to monitor progress with musculoskeletal conditions
- Discuss verbal and written reporting of clinical observations

8. Demonstrate an understanding of the application of a range of assistive devices, the safe use of, and maintenance of assistive devices used to maximize function in Occupational Therapy clients with musculoskeletal conditions.

Potential Elements of the Performance:

- Discuss commonly used assistive devices for the following musculoskeletal conditions:
 - **burns**
 - **acute hand injuries**
 - **arthritic diseases**
 - **lower extremity fractures and joint arthroplasty**
 - **amputations**
 - **back and neck injuries**

9. Demonstrate an understanding of the use of splints in the Occupational Therapy management of musculoskeletal conditions.

Potential Elements of the Performance:

- Review indications for the fabrication of splints
- Discuss the role of the OTA in splinting
- Demonstrate the ability to assist in the fabrication of a splint

10. Demonstrate an increased awareness of accessibility issues for clients with musculoskeletal conditions.

Potential Elements of the Performance:

- Consider various barriers and challenges regarding accessibility in the home environment and in the community
- Demonstrate knowledge and involvement in the City of Sault Ste. Marie's Accessibility Advisory Committee and Accessibility Plan
- Assist the Accessibility Advisory Committee by completing a "Barrier Identification Checklist"

10. Demonstrate an understanding of the different areas of Vocational Rehabilitation.

Potential Elements of the Performance:

- Discuss the benefits of various work related evaluations such as the Job Demands Analysis, Pre-Employment Screening, the FAE/FCE, and Work Hardening Programs
- Explore the role of the OTA/PTA in Vocational Rehab
- Demonstrate observational skills and reporting skills as required to evaluate various work activities and settings

11. Demonstrate knowledge regarding the use of assistive technology (computers, ECU's, electric wheelchairs) to maximize function in clients with musculoskeletal conditions.

Potential Elements of the Performance:

- Discuss the role of computers in the treatment of musculoskeletal disorders
- Demonstrate general knowledge regarding the selection and use of electric wheelchairs with clients with musculoskeletal conditions
- Review the use of assistive technology devices such as environmental control units

III. TOPICS:

1. Common causes, symptoms and medical intervention for the following musculoskeletal conditions:
 - **burns**
 - **acute hand injuries**
 - **arthritic diseases**
 - **lower extremity fractures and joint arthroplasty**
 - **amputations**
 - **back and neck injuries**

2. The role of the OT and OTA in providing treatment interventions for the above musculoskeletal conditions (education, therapeutic activity, observation and reporting)
3. Handling, positioning and transferring skills related to musculoskeletal conditions
4. ADL training and the use of assistive devices
5. Splinting
6. Accessibility
Vocational Rehab
7. Assistive technology-computers, environmental control units, electric wheelchairs

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Early, M.B. (1998). *Physical Dysfunction Practice Skills for the Occupational Therapy Assistant*. St. Louis, MO: Mosby (from 2nd semester)

Sladyk, K and Ryan, S. (2005). *Ryan's Occupational Therapy Assistant: Principles, Practice Issues and Techniques. (4th edition)*. SLACK Inc. (from 1st semester)

REFERENCE RESOURCES/TEXTS/MATERIALS:

Garrison, S. (2003). *Handbook of Physical Medicine and Rehabilitation, The Basics (2ND Edition)*. 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

1. 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.

Assignment #1-Occupational Therapy Bulletin Board	15%
Required Readings-Review Questions	10%
Labs Participation/Learning Activities	25%
Midterm Exam	25%
<u>Final Exam</u>	<u>25%</u>
Total	100%

2. All tests/exams are the property of Sault College.
3. 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.
4. 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.
5. 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 per day for every school day late with the permission of an extension. This means that if you requested an extension for 5 school days (1 week), 5 percentage points will be deducted from the final grade.

The following semester grades will be assigned to students:

<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: 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.

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.

VI. SPECIAL NOTES:

Course Outline Amendments:

The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Prior Learning Assessment:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question. Please refer to the Student Academic Calendar of Events for the deadline date by which application must be made for advance standing.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.

Substitute course information is available in the Registrar's office.

Disability Services:

If you are a student with a disability (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Disability Services office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Code of Conduct*. A professor/instructor may assign a sanction as defined below, or make recommendations to the Academic Chair for disposition of the matter. The professor/instructor may (i) issue a verbal reprimand, (ii) make an assignment of a lower grade with explanation, (iii) require additional academic assignments and issue a lower grade upon completion to the maximum grade “C”, (iv) make an automatic assignment of a failing grade, (v) recommend to the Chair dismissal from the course with the assignment of a failing grade. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Student Portal:

The Sault College portal allows you to view all your student information in one place. **mysaultcollege** gives you personalized access to online resources seven days a week from your home or school computer. Single log-in access allows you to see your personal and financial information, timetable, grades, records of achievement, unofficial transcript, and outstanding obligations, in addition to announcements, news, academic calendar of events, class cancellations, your learning management system (LMS), and much more. Go to <https://my.saultcollege.ca>.

Electronic Devices in the Classroom:

Students who wish to use electronic devices in the classroom will seek permission of the faculty member before proceeding to record instruction. With the exception of issues related to accommodations of disability, the decision to approve or refuse the request is the responsibility of the faculty member. Recorded classroom instruction will be used only for personal use and will not be used for any other purpose. Recorded classroom instruction will be destroyed at the end of the course. To ensure this, the student is required to return all copies of recorded material to the faculty member by the last day of class in the semester. Where the use of an electronic device has been approved, the student agrees that materials recorded are for his/her use only, are not for distribution, and are the sole property of the College.

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 granted admission to the room.