

COURSE OUTLINE		
TERM: Summer 2023	COURSE NO: RADP 232	
INSTRUCTOR: Katherine Callaghan	COURSE TITLE: Neurology Theory and Skills: PTA	
OFFICE: CE 380C LOCAL: 7339 E-MAIL: katherinecallaghan@capilanou.ca	SECTION NO(S): 01	CREDITS: 3.0
OFFICE HOURS: See Faculty Schedule		
COURSE WEBSITE: eLearn Course: RADP 232 01 - Summer 2023 (capu.ca)		

Capilano University acknowledges with respect the Lil'wat, Musqueam, Squamish, Sechelt, and Tsleil-Waututh people on whose territories our campuses are located.

VISION STATEMENT

The Rehabilitation Assistant Diploma Program prepares students to work under the general supervision of occupational therapists, physiotherapists and speech-language pathologists along the continuum of health care - from facility to community and from public to private practice. Rehabilitation Assistants deliver services by assisting clients in managing impairments and developing, maintaining or restoring skills to achieve optimal levels of activity and participation. Equally important are the operational services which support the safe delivery and measurement of efficient and effective rehabilitation services

Please see the university website for the most updated COVID safety information:

[Campus Safety - Capilano University](https://capu.ca/campus-safety)

COURSE FORMAT

Welcome to RADP 232 which includes 6 hours of class per week for 9 weeks. The course includes online quizzes, written and group assignments as well as a practical exam. The Final Practical Exam will be scheduled on July 7, 2023. Please note in week 7 there is 2 full days of classes.

COURSE PREREQUISITES/CO-REQUISITES

Must be registered in RADP 230 or by consent of the Program Coordinator

CALENDAR DESCRIPTION

Students will learn to apply theory and acquire the practical rehabilitation assistants skills used in the treatment of neurological diseases and injuries when working with physiotherapists

REQUIRED TEXTS AND/OR RESOURCES

eLearn for this course will contain supplementary reading material, websites and web applications

COURSE STUDENT LEARNING OUTCOMES

On successful completion of this course, students will be able to do the following:

- *Observe and report on the skills, activity and participation level of neurological clients including:*
 - Transfer level
 - Levels of fatigue
 - Recognizing when it is safe to mobilize a neurological patient
- *Apply intervention methods to restore/maintain skills in a variety of Neurological impairments:*
 - Be able to adapt handling skills to altered muscle tone
 - Perform/assist range of motion and strengthening exercises
- *Provide intervention training in and assist physiotherapist with:*
 - Transfers, Special Transfers, Hoists and Lifts
 - Bed/Mat mobility
 - Ambulation (with and without gait aids)
 - Stair practice
- *Provide program support by:*
 - Teaching Bed Handling and positioning to health care staff
 - Teaching Transfers, Special Transfers, Hoists and Lifts
 - Be competent with infection control protocol

COURSE CONTENT

May 12, 2023 Session 1 Introduction and Overview to the Course	● Course orientation & introduction to philosophies of PT approaches in neurology. ● Describe the role of the PT/PTA in neurological physio ● Describe safe practices in neurology ● Describe motor control theories and the 3 stages of motor learning.
Session 2 Assessment of the Neurological Client.	● Practical assessment of the neurological client ● Review PROM for a neurological client ● Discuss/ practice observational skills and communication of reporting in a neurological client ● Positioning of the hemiplegic client (bed and WC positions after stroke).
May 19, 2023 Session 3 Management of tone & Theory of Balance	● Define and discuss tone / synergies and clinical management of abnormal tone. ● Explain how tone influences types of transfer and movement transitions. ● Describe the terminology used in the study of balance and mobility

Session 4 CVA Early Interventions	• Demonstrate and practice bed / mat mobility • Demonstrate facilitated bridging, scooting. • Demonstrate and perform movement transitions (rolling, LTS, STL) • Assess sitting balance and practice transfers from bed to WC (low pivot and sliding board) with 1PA and 2PA • Describe Sara Steady and Floor to Ceiling Pole transfers
May 26, 2023 Session 5 Advanced balance, Gait theory & practice.	• Identify the systems that contribute to balance and postural stability. • Review of Gait cycle and considerations to start Gait Training • Describe pathological gait patterns in neurology and therapeutic interventions
Session 6 Advanced mobility for the neurological client	• Describe the Egress Test for safe screening of heavier / dependent clients • Discuss pros/cons of mobility aids • Standing balance exercises • Gait re-education 1PA and 2PA • Demonstration of orthotics and gait aids
June 2, 2023 Session 7 Upper Extremity Interventions for the Neurological Client	QUIZ 1 • Describe care and handling of the upper extremity in neurological conditions • Discuss treatment strategies and techniques for reach/grasp and manipulation of objects
Session 8 Upper Extremity skills	• UE handling (PROM and facilitation of the hemiplegic UE and scapular mobility. • PNF patterns (D1 and D2 for UE) and rhythmic stabilizations
June 9, 2023 Session 9 TBI Interventions: acute phase	INDIVIDUAL REPORTS DUE • Review of traumatic brain injury and the role of physiotherapy • Discuss the theory of positioning the acute TBI client in bed / wheelchair • Discuss the challenges of mobilizing with increased tone in TBI clients • Discuss the use of Tilt Tables in rehab and monitoring of vital signs • Discuss the theory of prone/semi prone positioning in TBI clients

Session 10 TBI Interventions: rehab phase	- Challenges in TBI Rehab: advanced handling - Mat activities for the TBI client - Sit to stand practice - High level gait training - Ascending and descending stairs
June 16, 2023 Session 11 Mechanical Lifts	- Describe mechanical lift use and safety considerations for operation - Instruction and practice in use of ceiling lift for clients who cannot weight-bear
Session 12 Introduction to Paediatric Neurology PT interventions	- Review developmental milestones for the first year of life - Discuss handling and positioning principles for the neurologically impaired child - Discuss PT goals for the improvement of function in the neurologically impaired child
June 22, 2023 Session 13	Describe and discuss selected PT Interventions for progressive neurological disorders including MS, PD, ALS, GBS
Session 14 PT Interventions for Progressive Neurological Conditions	- Introduction to the BIG program for Parkinson's Disease - Describe and practice selected neuro treatment techniques including mirror box therapy and Recognize app. - Neuro-developmental sequencing for gait training
June 23, 2023 Session 15 Spinal Cord Injury	QUIZ 2 - Explain respiratory interventions for the SCI client - Teach strategies for movement in the SCI population - Outline expected functional mobility outcomes for spinal cord levels - Explore methods of ambulation training, including functional electrical stimulation/ treadmill supported training
Session 16 SCI: Physio Interventions	- Discuss spinal precautions in the SCI population - Observe videos of bed mobility and transfers - Sliding Board Transfers for SCI population - Guest Lecturer for afternoon session

June 30, 2023 Session 17	Group Presentations (to be filmed)
Session 18 Review of practical skills	Review of core practical skills, including bed mobility, transfers, ambulation, care of affected limbs in the neurological population
July 2, 2021 Session 19 Practical Exam	Practical Exam
Session 20 Practical Exam	Practical Exam

EVALUATION PROFILE

Marks will be based on completion of assignments, class participation, attendance and quizzes/exams.

1. Attendance / Punctuality	5%
2. Participation	10%
3. Quizzes (2x10%)	20% (1 st quiz online, 2 nd quiz in person)
4. Individual Case Report	15% (submit online)
5. Group Case Study presentation	15% (in class)
6. Demonstrate master of practical skills	35%

TOTAL**100%**

***See eLearn or Course Outline for quiz dates and deadlines for assignments**

ASSIGNMENTS

1. Individual Case Report: Student chooses a neurological condition and answers questions about that condition.
2. Group Case study: Students will be assigned transfer techniques, positioning and neurological treatments to present to the class. The presentations will be videoed to provide a library of therapy techniques for future online cohorts.

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3. Mastery of practical skills will be measured according to documented professional competencies/guidelines and the frame of reference used throughout the RA diploma program.

GRADING PROFILE

A+ = 90-100	B+ = 77-79	C+ = 67-69	D = 50-59
A = 85-89	B = 73-76	C = 63-66	F = 0-49
A- = 80-84	B- = 70-72	C- = 60-62	

RA DIPLOMA:

To receive an RA Diploma, students must pass all courses and practica, achieving a CGPA of B or better.

CONTINUATION:

A student who fails any course (D or F or NC) may not be allowed to continue in the program.

Incomplete Grades

Grades of Incomplete "I" are assigned only in exceptional circumstances when a student requests extra time to complete their coursework. Such agreements are made only at the request of the student, who is responsible to determine from the instructor the outstanding requirements of the course.

Late Assignments

All assignments must be presented at the beginning of class on the due date.

Late assignments will only be accepted if prior approval for a late submission date has been given by the instructor.

Marks will be deducted for the late submission of assignments. The penalty for late submission of an assignment is 10% for each day the assignment is late.

Missed Exams/Quizzes/Labs etc.

Missed tests will be graded "0" unless prior arrangements are made with the instructor.

Attendance

Regular attendance is essential. If a student misses a class due to extenuating circumstances, they are still responsible for the material covered during their absence, including announcements, assigned readings and hand-outs. Make up work may be assigned by the instructor. It is the student's responsibility to arrange this with the instructor. Students who miss more than 10% of the course are at risk of failing the course.

English Usage

Correct spelling and grammar are expected in all written reports, assignments and examinations

Electronic Devices

Students may use electronic devices during class for note-taking only.

Communication: Please be sure to check your official Capilano University email regularly as all official communication will be sent via this email address only. Additionally, you should be logging on to eLearn 3 to 4 times per week to class updates.

What you can expect from me:

- To respond to emails within 24 hours
- To start and end class on time
- To be responsive to your feedback about the course
- To respond to any questions/clarifications

What I can expect from you:

- To attend live online sessions on time
- To be attentive and engaged during online class sessions
- To come prepared for class discussions
- To interact respectfully with peers
- To mute your microphone when not speaking
- To ask questions and seek help when appropriate

UNIVERSITY OPERATIONAL DETAILS**Tools for Success**

Many services are available to support student success for Capilano University students. A central navigation point for all services can be found at: <http://www.capilanou.ca/services/>

Capilano University Security: download the [CapU Mobile Safety App](#)

Policy Statement (S2009-06)

Capilano University has policies on Academic Appeals (including appeal of final grade), Student Conduct, Academic Integrity, Academic Probation and other educational issues. These and other policies are available on the University website.

Academic Integrity (S2017-05)

Any instance of academic dishonesty or breach of the standards of academic integrity is serious and students will be held accountable for their actions, whether acting alone or in a group. See policy S2017-05 for more information: <http://www.capilanou.ca/about/governance/policies/Policies/>

Violations of academic integrity, including dishonesty in assignments, examinations, or other academic performances, are prohibited and will be handled in accordance with the Student Academic Integrity Procedures.

Academic dishonesty is any act that breaches one or more of the principles of academic integrity. Acts of academic dishonesty may include but are not limited to the following types:

Cheating: Using or providing unauthorized aids, assistance or materials while preparing or completing assessments, or when completing practical work (in clinical, practicum, or lab settings), including but not limited to the following:

- Copying or attempting to copy the work of another during an assessment;
- Communicating work to another student during an examination;
- Using unauthorized aids, notes, or electronic devices or means during an examination;
- Unauthorized possession of an assessment or answer key; and/or,
- Submitting of a substantially similar assessment by two or more students, except in the case where such submission is specifically authorized by the instructor.

Fraud: Creation or use of falsified documents.

Misuse or misrepresentation of sources: Presenting source material in such a way as to distort its original purpose or implication(s); misattributing words, ideas, etc. to someone other than the original source; misrepresenting or manipulating research findings or data; and/or suppressing aspects of findings or data in order to present conclusions in a light other than the research, taken as a whole, would support.

Plagiarism: Presenting or submitting, as one's own work, the research, words, ideas, artistic imagery, arguments, calculations, illustrations, or diagrams of another person or persons without explicit or accurate citation or credit.

Self-Plagiarism: Submitting one's own work for credit in more than one course without the permission of the instructors, or re-submitting work, in whole or in part, for which credit has already been granted without permission of the instructors.

Prohibited Conduct: The following are examples of other conduct specifically prohibited:

- Taking unauthorized possession of the work of another student (for example, intercepting and removing such work from a photocopier or printer, or collecting the graded work of another student from a stack of papers);
- Falsifying one's own and/or other students' attendance in a course;
- Impersonating or allowing the impersonation of an individual;
- Modifying a graded assessment then submitting it for re-grading; or,
- Assisting or attempting to assist another person to commit any breach of academic integrity.

Sexual Violence and Misconduct

All Members of the University Community have the right to work, teach and study in an environment that is free from all forms of sexual violence and misconduct. Policy B401 defines sexual assault as follows:

Sexual assault is any form of sexual contact that occurs without ongoing and freely given consent, including the threat of sexual contact without consent. Sexual assault can be committed by a stranger, someone known to the survivor or an intimate partner.

Safety and security at the University are a priority and any form of sexual violence and misconduct will not be tolerated or condoned. The University expects all Students and Members of the University Community to abide by all laws and University policies, including [B.401 Sexual Violence and Misconduct Policy](#) and [B.401.1 Sexual Violence and Misconduct Procedure](#).

Emergencies: Students are expected to familiarise themselves with the emergency policies where appropriate and the emergency procedures posted on the wall of the classroom.

DEPARTMENT OR PROGRAM OPERATIONAL DETAILS

Refer to RADP student manual.