NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY OCT 210 – ASSISTIVE TECHNOLOGY IN OCCUPATIONAL THERAPY (2 CR.)

Course Description

Explores the assistive technologies available for persons with physical, sensory and cognitive disabilities. Provides instruction in the process of assessment, selection adaptation and training of assistive technology to persons with a disability. Presents information on funding and maintenance of devices. Exposes students to technology in clinical practice and equipment companies. Lecture 2 hours per week.

General Course Purpose

The purpose of this course is to expose students to the principles, strategies, and application of high-tech and low-tech assistive technology (AT) tools and strategies to enhance the occupational participation and performance of clients across the lifespan. Students will become familiar with environmental adaptations and ergonomic principles used to support clients in their occupational roles. The course will review legislation relevant to AT implementation and funding such as the American with Disabilities Act and the Individuals with Disabilities Education Act.

Course Prerequisites/Corequisites

Prerequisites: Completion of OTA program in semesters 1-3 coursework.

Course Objectives

Upon completing the course, the student will be able to:

- Articulate principles of the application and implementation of AT devices and services used to enhance clients' occupational performance and participation. (aligns with 2018 ACOTE standard B.4.11)
- 2. Articulate the role of the use of technology to support clients' occupational performance, participation, health and well-being across the lifespan. (aligns with 2018 ACOTE standard B.4.11)
- 3. Explain the need for and demonstrate strategies with assistive technologies and devices used to promote occupational performance and participation and overall well-being. (aligns with 2018 ACOTE standard B.4.11)
- 4. Identify various AT used to support client participation in basic and instrumental activities of daily living across the lifespan including cognitive prosthetics, low vision devices, gaming systems, devices for transportation and driving, electronic aids to daily living, and augmentative and alternative communication devices. (aligns with 2018 ACOTE standard B.4.11)
- 5. Compare and contrast various seating and positioning systems used to enhance occupational performance and support the health and wellness of clientele. (aligns with 2018 ACOTE standard B.4.11)
- 6. Assess, grade, and modify the way persons, groups, and populations perform occupations and activities by adapting processes, modifying various environments, including home, work, school and other environments, to enhance occupational participation and safety. (aligns with 2018 ACOTE standard B.4.18)
- 7. Articulate ergonomic principles and apply pertinent strategies while making environmental adaptations to support the health and wellness of an individual. (aligns with 2018 ACOTE standard B.4.18)
- 8. Apply American with Disabilities Act (ADA) standards for accessible design in various client settings across the lifespan.
- 9. Explain the Individuals with Disabilities Education Act as related to assistive technology.

- 10. Compare and contrast the continuum of low-tech to high-tech assistive technology options currently available and commonly utilized in clinical practice.
- 11. Teach compensatory strategies to include high and low technologies and environmental adaptations to support participation, performance, and well-being of the clients being served.
- 12. Explain funding and maintenance of common assistive technology and devices used by OT practitioners.
- 13. Articulate the healthcare trends using environments, and telehealth technologies. (aligns with 2018 ACOTE standard B.4.15)

Major Topics to be Included

- ADA standards for accessible design
- High-tech and low-tech options currently utilized in clinical practice.
- Funding sources and maintenance of common assistive technology and devices.
- Ergonomic principles and related adaptations
- Environmental adaptations to support clients' overall occupational participation