PT 523 Lifespan I 2021

PT 523: LIFESPAN I (2021)

DESCRIPTION:
Content related to development of human movement system; age-appropriate patient/client management; family-centered care; health promotion and safety; and legislative, policy, and systems are applied to pediatric patient/client management. Evidence-based practice for specific, common pediatric conditions is emphasized in the application of core content concepts.

CAPTE Standards & Elements:
Standard 7: Elements 7A, 7B, 7C, and 7D as appropriate based upon the age-appropriate patient case.

DEPARTMENT OFFERING THE COURSE AND INSTRUCTOR(S):
Physical Therapy

Credit Hours:
Three (3) credit hours

Instructor(s):
- Mohamed Elhamadany, PT, MS, DPT, PhD, PCS
  701-777-3689. mohamed.elhamadany@und.edu
- Emily Henneman, PT, DPT
  701-777-3673. emily.henneman@und.edu

CLOCK HOURS:
Lab/Lecture/Applications: Mondays, 8:00 a.m. – 12 p.m., Friday 10:00 a.m. – 12:00p.m.

COURSE PREREQUISITES:
Registered in Professional Physical Therapy Curriculum.

COURSE OBJECTIVES:
Upon completion of this course, the student should be able to:

1. Development of Human Movement System: Analyze the development of movement skills and integrate knowledge of human development (motor, psychosocial, cognitive, and communication) with clinical decision making. Students will build upon concepts of normal development, motor control, and motor learning to address the physical therapy needs of children

2. Age-appropriate patient/client management: Demonstrate appropriate performance of developmental screening for growth and motor delays/impairments, parent or child interview/history with systems review, selection of appropriate test and measures and interpretation of findings, and development and implementation of appropriate, child/family centered, pediatric plans of care addressing interventions, adaptive equipment, orthoses, and supports.
3. **Family-centered Care:** Consistently collaborate with families in the patient/client management process, address family priorities and the role of the family in under the Individuals with Disabilities Education Act, Parts B and C and other aspects of care, analyze the influence of the child with special needs on the family system and factors within the family system that influence the child’s growth and development, and demonstrate effective education of others using culturally competent, lay terminology with children, families, and other non-medical professionals.

4. **Health Promotion and Safety:** Develop plans to promote age-appropriate health and wellness, make appropriate determination of the need for referrals to other health care professionals, and develop age-appropriate educational materials, using lay terminology, to address safety and environmental influences.

5. **Legislative, Policy, and Systems:** Demonstrate understanding of the characteristics of pediatric service provision in various pediatric settings, identify the required elements of IFSP and IEP and provide appropriate education on the tenants of IDEA, demonstrate the ability to write appropriate family-centered IFSP goals and educationally relevant IEP goals, and demonstrate an understanding of requirements for mandatory reporting of suspected child abuse, neglect, and bullying.

6. **Evidence-based Practice:** Student will be able to describe/define selected pediatric conditions including but not limited to: Cerebral Palsy, Torticollis, Down syndrome, Myleodysplasia, Muscular Dystrophy, Spinal Muscular Atrophy, Common Genetic Disorders, Common Orthopedic Conditions, Common Cardiopulmonary conditions, Fitness and childhood obesity, Autism spectrum, and other...

   - Differentiating diagnosis
   - Differentiating prognosis
   - Determining the correct pediatric practice pattern from the APTA Guide to PT Treatment
   - Describe etiology, pathology, and signs/symptom
   - Justify clinical disposition
   - Describe, justify, determine role of PT in care

Course content and objectives have been designed to address the five essential core competencies for entry-level Doctor of Physical Therapy graduates as outlined in Rapport et al. Essential Competencies in entry-level pediatric physical therapy education. Pediatr Phys Ther 2014; 26:7-18.

The above objectives also contribute to the Practice Model Components of Foundational Science; Clinical Science, Professional Practice, and Patient/Client Care & Practice Management.

**OUTLINE OF CONTENT AND ASSIGNED INSTRUCTOR:**
See attached course schedule.
TEACHING METHODS AND LEARNING EXPERIENCES: A problem-oriented model which incorporates a variety of team activities is used throughout the course to guide critical inquiry, clinical decision-making and patient management for specific, common pediatric conditions. Lectures, laboratory application activities and experiential learning experiences in various community health fairs are also implemented to promote examination, evaluation, and intervention skills and planning.

Experiential Learning Experiences
The Department of Physical Therapy has multiple opportunities for students to participate in clinical practice activities under the supervision of UND faculty, all of whom are licensed physical therapists. During this particular course, you may be required to participate in the examination, evaluation, and physical therapy interventions of community members. You will be providing primary care to individuals with impairments and/or dysfunction during laboratory classes, community health fairs, pro bono clinics, and/or within traditional clinical practices.

METHODS OF EVALUATION:
Written Examinations
Practical Applications

Grading:

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<tr>
<th>Grade</th>
<th>Percentage Range</th>
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<tbody>
<tr>
<td>A</td>
<td>90% - 100%</td>
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<tr>
<td>B</td>
<td>80% - 89.9%</td>
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<tr>
<td>C</td>
<td>76% - 79.9%</td>
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<tr>
<td>Failure</td>
<td>75% or below</td>
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</table>

Assessment Implementation and Documentation:
Students will be required to participate actively in class and small group discussions and demonstrate competency in course content through:

- Quizzes up to 60 points
- Midterm Exam up to 60 points
- Graded lab Activities/ Class Participation up to 40 points
- Prepare and orally present a case study portfolio up to 90 points
- Comprehensive Final Exam up to 100 points

Examinations:
Students are expected to pass written and laboratory examinations. Passing scores for written and laboratory exams are 76% and 80% respectively. Failure to successfully complete a practical examination will result in one retake examination to demonstrate proficiency. Inability to obtain a passing score on two attempts may result in failure of the course. See the UND-PT Scholastic Standards document for further reference.
TEXTBOOK AND OTHER LEARNING RESOURCES:

Required Reading:
- Palisano, RJ, Orlin, MN, Schreiber J. Campbell’s Physical Therapy for Children (5th Ed) (Campbell’s), Required
- Long T, Battaile B, Toscano K. Handbook of Pediatric Physical Therapy (3th Ed), (Long’s) Required

Recommended Readings:
- Pipper, M. D., Darrah, J. Motor Assessment of the Developing Infant (AIMS), (Pipper’s), Recommended

Additional reading assignments are made according to the assessment instruments utilized.

ATTENDANCE:
Class attendance is expected 100% of the time. Students must first attempt to notify the instructor by phone or in person for any absences. The student must also contact the instructor directly through e-mail or written documentation for any absences.

Make Up Work/Examinations:
Arrangements for make-up examinations must be made by the student within three days of the student’s return to classes for all absences. Students may be assigned additional coursework for all absences. Students will not be allowed to make-up in-class quizzes/projects due to an absence.

ACADEMIC INTEGRITY:
In accordance with the rules concerning scholastic dishonesty in the Code of Student Life® at the University of North Dakota, I affirm that I understand these rules and I agree to comply with them. I will not:
   a. receive any additional information or assistance for any exam other that what was provided during class or approved tutor sessions
b. copy from another student’s test  
   a. collaborate with or seek aid from another student who may have previously taken the exam  
   b. knowingly use, buy, sell, steal, or solicit in whole or in part the contents of any exam  
   c. bribe another person to obtain information about any exam

DISABILITY ACCESS STATEMENT:  
Contact me, FACULTY (office 777-3689, email mohamed.elhamadany@med.und.edu, or visit Rm E-34X UND SMHS) to request disability accommodations, discuss medical information, or plan for an emergency evacuation. To get confidential guidance and support for disability accommodation requests, students are expected to register with DSS at www.UND.edu/disability-services/, 180 McCannel Hall, or 701.777.3425.

NOTICE OF NONDISCRIMINATION: It is the policy of the University of North Dakota that no person shall be discriminated against because of race, religion, age, color, gender, disability, national origin, creed, sexual orientation, gender identity, genetic information, marital status, veteran’s status, or political belief or affiliation and the equal opportunity and access to facilities shall be available to all. Concerns regarding Title IX, Title VI, Title VII, ADA, and Section 504 may be addressed to Donna Smith, Director of Equal Employment Opportunity/Affirmative Action and Title IX Coordinator, 401 Twamley Hall, 701.777.420181, und.affirmativeactionoffice@UND.edu or the Office for Civil Rights, U.S. Dept. of Education, 500 West Madison, Suite 1475, Chicago, IL 60611 or any other federal agency.

REPORTING SEXUAL VIOLENCE: If you or a friend has experienced sexual violence, such as sexual assault, domestic violence, dating violence or stalking, or sex-based harassment, please contact UND’s Title IX Coordinator, Donna Smith, for assistance: 701.777.420181; donna.smith@UND.edu or go to UND.edu/affirmative-action/title-ix.

FACULTY REPORTING OBLIGATIONS REGARDING SEXUAL VIOLENCE: It is important for students to understand that faculty are required to share with UND’s Title IX Coordinator any incidents of sexual violence they become aware of, even if those incidents occurred in the past or are disclosed as part of a class assignment. This does not mean an investigation will occur if the student does not want that, but it does allow UND to provide resources to help the student continue to be successful at UND. If you have been the victim of sexual violence, you can find information about confidential support services at UND.edu/affirmative-action/title-ix.

OMBUDS OFFICE: "It is not our differences that divide us. It is our inability to recognize, accept, and celebrate those differences” (Audre Lorde). Before your differences with others become difficult and costly conflicts or formal grievances, in both seen and unseen ways, talk with the Ombuds Office in an informal, identity-protecting, impartial, and independent space. 314 Cambridge St Room 201. 701.777.6239. www.UND.edu/ombuds.
UND CARES RESPONSE TEAM: The UND Cares Response Team is available to assist with incidents involving UND students 24 hours a day, seven days a week. They respond to incidents such as major accidents, missing students, sickness that interferes with attending classes, death, suicidal ideations, situations involving self-harm, psychological trauma and sexual violence. Contact directly at 701.777.2664 during regular business hours OR 701.777.3491 after hours. If problems occur, students are required to work through channels of communication to resolve the problem before going to the chair or dean. The channel is student, instructor, chair, associate dean health sciences, and dean. rev 2/06, 5/06, 5/07, 4/08, 5/09, 5/10, 5/11, 8/13, 8/14, 8/15, 8/16, 11/18

COVID-19 INFORMATION: All members of the University community have a role in creating and maintaining a COVID-19 resilient campus. There are several expectations that all community members, including students, are asked to follow for the safety of all: maintain physical distancing of at least 6 feet while in UND facilities, wear face coverings during interactions with others and in the classroom, wash their hands often and use hand sanitizer, properly clean spaces that they utilize, and if experiencing any symptoms, stay home and call their health care provider. Students electing not to comply with any of the COVID related requirements will not be permitted in the classroom and may be subject to disciplinary action. We encourage all members of the University community choose to model positive behavior both on- and off-campus. Information regarding the pandemic and UND’s efforts to create a COVID resilient campus is available on the COVID-19 blog (http://blogs.und.edu/coronavirus/). Please subscribe to stay up to date on COVID related information. Students who test positive for COVID-19 or are identified as a close contact are expected to immediately self-isolate/quarantine. If you have tested positive for COVID19 or have been placed in quarantine due to being identified as a close contact or travel, we strongly recommend that you report the information to the Office of Student Rights and Responsibilities at 701.777.2664 or online at https://veoci.com/veoci/p/w/ss2x4cq9238u. Doing so will ensure students have the support they need to continue with their academic goals and to protect others.
**PT 523 Lifespan I 2021**

**PT 523: Outline of Content:** Mondays Lab 8:00 a.m.–12 p.m., Fridays Zoom class 10:00 a.m.–12:00 p.m.

**Mondays Split Labs:**
Lab Group A&B (Teams 1 – 5): 1st Lab (8 a.m. – 10 a.m.),
Lab Group C&D (Teams 6 – 10): 2nd Lab (10 a.m. – 12:00 p.m.)

**Lab Times Switch on 3/01/2020**

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC &amp; ASSIGNMENT</th>
<th>Instructors</th>
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<tbody>
<tr>
<td>Mon: 1/11/2021</td>
<td>No Class. UND classes start at 4:00 p.m.</td>
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<tr>
<td>Fri: 1/15/2021</td>
<td>Synchronous/live class</td>
<td>ME, EH</td>
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<td></td>
<td>Course Orientation</td>
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<td></td>
<td><strong>MODULE #1: PEDIATRIC PT TOOLBOX:</strong></td>
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<tr>
<td></td>
<td>- Motor development theories (Pipper’s)</td>
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<td></td>
<td>- Development of Movement System (0-12m) (Long’s Ch.1)</td>
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<td>Mon: 1/18/2021</td>
<td>Martin Luther King Day holiday- No class</td>
<td>ME, EH</td>
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<td>Fri: 1/22/2021</td>
<td>Synchronous/live class</td>
<td>ME, EH</td>
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<td><strong>MODULE #1: PEDIATRIC PT TOOLBOX:</strong></td>
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<td>- Development of Movement System (1-5yrs) (Long’s Ch.1)</td>
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<td>- Gait development (Campbell’s Ch.34)</td>
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<td>Mon: 1/25/2021</td>
<td>Split Lab Room: E312</td>
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<td><strong>MODULE #1: PEDIATRIC PT TOOLBOX</strong></td>
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<td></td>
<td>- Constraints to Development of Movement System</td>
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<td>- Motor Assessment of Developing Infant, AIMS (Pipper’s)</td>
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<td>Fri: 1/29/2021</td>
<td>Synchronous/live class</td>
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<td><strong>MODULE #1: PEDIATRIC PT TOOLBOX</strong></td>
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<td></td>
<td>- Foundations of Pediatric Examination/Parent Interview</td>
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<td>- Common pediatric Tests/Measures: PDMS, HELP</td>
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<td><strong>QUIZ #1 cover module 1</strong></td>
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<td>Patient Portfolio - Topic1: Group Submission</td>
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<td>Mon: 2/01/2021</td>
<td>Split Lab Room: E312</td>
<td>ME, EH, JB</td>
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<td><strong>MODULE #1: PEDIATRIC PT TOOLBOX</strong></td>
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<tr>
<td></td>
<td>- Assessment of Reflexes</td>
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<td>- Application of Tests/Measures: PDMS, HELP</td>
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<td>Fri: 2/05/2021</td>
<td>Synchronous/live class</td>
<td>ME, EH</td>
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<td><strong>MODULE #2: PEDIATRIC NEUROLOGY:</strong></td>
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<tr>
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<td>Cerebral Palsy- Background Information (Campbell’s Ch.19)</td>
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<td>- Etiology, Classification, and Examination, GMFCS</td>
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<td><strong>QUIZ #2</strong></td>
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<td>Patient Portfolio - Topic1: Individual responses</td>
<td>DUE</td>
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<tr>
<td>Mon: 2/08/2021</td>
<td>Site visit GF Daycares/Schools</td>
<td>ME, EH</td>
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<td><strong>EXPERIENTIAL LEARNING EXPERIENCES I</strong></td>
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<td>GF day cares OR Public school</td>
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<tr>
<td>Fri: 2/12/2021</td>
<td>Synchronous/live class</td>
<td>ME, EH</td>
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<td>Cerebral Palsy-Foreground information (Campbell’s Ch.19)</td>
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<td></td>
<td>- Diagnosis, Prognosis, and Intervention</td>
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<td>- Case Scenario, Applications</td>
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<td><strong>QUIZ #3</strong></td>
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<td>Patient Portfolio - Topic2: Group Submission</td>
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<td>Mon 2/15/2021</td>
<td>President’s Day - No Class</td>
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<tr>
<td>Date</td>
<td>Time</td>
<td>Event Description</td>
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| Fri: 2/19/2021 | Synchronous/live class | **MODULE #2: PEDIATRIC NEUROLOGY**  
Myelodysplasia (Campbell’s Ch.23)  
Perinatal Brachial Plexus Injury (PBPI) (Campbell’s Ch.20) | ME, EH     |                            |
| Mon: 2/22/2021 | Split Lab Room: E312 | **PT Interventions for Children with Neurological Disorders**  
- Intervention Approaches: Prone Development  
- Tests/Measures | ME, EH     |                            |
| Fri: 2/26/2021 | Synchronous/live class | **MODULE #2 PEDIATRIC NEUROLOGY**  
SCI (Campbell’s Ch.21)  
TBI (Campbell’s Ch.22) | EH, ME     |                            |
| Mon: 3/01/2021 | Split Lab Room: E312 | **PT Interventions for Children with Neurological Disorders**  
- Intervention Approaches: Supine & Sitting Development  
- Tests/Measures | ME, EH     |                            |
| Fri: 3/05/2021 | Synchronous/live class | **MODULE #3: PEDIATRIC ORTHOPEDIC**  
Musculoskeletal development & adaptation (Campbell’s Ch.5)  
Torsional profile (Campbell’s Ch.14) +DDH  
Common pediatric deformities (Campbell’s Ch.14) | ME, EH     |                            |
| Mon: 3/08/2021 | Split Lab Room: E312 | **PT Examination for Children with Orthopedic conditions**  
- Torsional profile lab  
Orthotics: Applications, discussion | ME, EH, LO |                            |
| Thru: 3/11/2021 | 5:30-7:30pm | **EXPERIENTIAL LEARNING EXPERIENCES II**  
Assistive Technology @ Altru Rehabilitation Center  
Teams 6 – 10: 1st Lab (5:30 -6:30 p.m.),  
Teams 1 – 5: 2nd Lab (6:30 -7:30 p.m.) | LO, ME, EH |                            |
| Fri: 3/12/2021 | Synchronous/live class | **MODULE #3: PEDIATRIC ORTHOPEDIC:**  
Orthopedic Conditions -I (Campbell’s Ch.14) | ME, EH     |                            |
| Mon: 3/15/2021 & Fri: 3/19/21 | Spring Break | NOTE: Daylight Saving’s Time Sun 3/14/2020                                      |            |                            |
| Mon: 3/22/2021 | Split Lab Room: E312 | **PT Interventions for Children with Neurological Disorders**  
- Intervention Approaches: Standing & waking Development  
- Tests/Measures | ME, EH     |                            |
| Fri: 3/26/2021 | Synchronous/live class | **MODULE #3 PEDIATRIC ORTHOPEDIC:**  
Orthopedic Conditions -II  
- Spinal conditions (Campbell’s Ch.8)  
- Juvenile Idiopathic Arthritis (JIA) (Campbell’s Ch.7)  
- Arthrogryposis Multiplex Congenita (AMC) (Campbell Ch.10) | ME, EH     |                            |
## Week 7

### Mon: 3/29/2021
- **Split Lab**  
  Room: E312

**Osteogenesis Imperfecta (OI)** (Campbell’s Ch.11)

- **QUIZ #7**

### Thru 4/1

### Fri: 4/02/2021 & Mon: 4/05/2021
- **Split Lab**  
  Room: E312

**Orthopedic Conditions - III**
- Muscular Dystrophies and Spinal Muscular Atrophy (Campbell’s Ch.12)
- Congenital Muscular Torticollis (CMT) and Plagiocephaly (Campbell’s Ch.9)

- **QUIZ #8**

### Fri: 4/09/2021
- **Synchronous/live class**

**Muscular Dystrophies and Spinal Muscular Atrophy**
- Infant and toddler vitals
- Congenital heart Conditions (Campbell’s Ch.28)

- **Patient Portfolio - Topic 4: Individual responses** DUE

### Mon: 4/12/2021
- **Synchronous/live class**

**Asthma** (Campbell’s Ch.27)
- CF (Campbell’s Ch.26)

- **QUIZ #9: cover module 4**

### Fri: 4/16/2021
- **Synchronous/live class**

**GENETIC DISORDERS & ASD**
- Down Syndrome (DS)
- Autism spectrum disorder (ASD) (Campbell’s Ch.24)
- Application: DS, ASD Case studies

- **QUIZ #10: cover module 5**

### Mon: 4/19/2021
- **Site visit**
  GF Pediatric Settings

**Children with Multiple Disabilities**
- Integrated Case Studies

- ****EXPERIENTIAL LEARNING EXPERIENCES-III

### Fri: 4/23/2021
- **Synchronous/live class**

**LEGISLATIVE**
- Educational Environment / IDEA PART B (Campbell’s Ch.31)
- Early Intervention/ IDEA PART C (Campbell’s Ch.30)
- Applications: case studies from school environment & EI

- **QUIZ #11: cover module 6**

### Mon: 4/26/2021
- **Synchronous/live class**

**STUDENTS PRESENTATION**
- 15-minutes presentation on students’ patient-portfolio to the class
  - Team 1-5

- **Patient Portfolio - Topic 5: Individual responses** DUE

### Fri: 4/30/2021
- **Synchronous/live class**

**STUDENTS PRESENTATION**
- 15-minutes presentation on students’ patient-portfolio to the class
  - Team 6-10

### Mon: 5/03/2021
- **FINAL WEEK (FINAL WRITTEN EXAM)**

**Please note experiential learning experiences are subject to change due to inclement weather and or facilities needing to cancel the site visit. You will be notified of change ASAP.**