NorthWest Arkansas Community College  
Course Syllabus  
Fall 2005  

PHTA 2252 Life Span  

COURSE INSTRUCTOR Name: Rhonda Crider  
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Office Hours: T T  
9:00-2:00 9:00 – 2:00  
*or by appointment  
Class Hours: F 8:30-11:00  

PEDIATRIC INSTRUCTOR: Kerri Russell  
Week 2 - Week 5  

Student Information Line 619-4376 for the status of classes  

PREREQUISITE: Admission into the Physical Therapist Assistant Program (PTA)  
Completion of Summer courses  

COURSE DESCRIPTION: This course explores the stages of development across the lifespan. Development for each stage is examined with attention to individual differences and variations in development related to physical, psychosocial, and cognitive changes. Physical changes, emotional development, and social/community expectations will be explored throughout the lifespan with emphasis on how these changes affect treatment considerations, teaching strategies and discharge planning.  

INSTRUCTIONAL MATERIALS  
Required:  
1. Laura Berk. Development Through the Lifespan. Allyn and Bacon; 2004  

METHODS OF INSTRUCTION  
1. Lecture  
2. Handouts  
3. Small Group Activities  
4. Video Presentation  
5. Case Based Problem-Solving Activities  
6. Role Playing  
7. Group Discussion  
8. Community interview and activities
GRADING SCALE

A = 93 – 100
B = 85 – 92
C = 77 – 84
D = 69 – 76
F = <68

GRADING

Quizzes & Examinations 60%
Assignments 15%
Comprehensive Final Examination 25%

GRADES WILL BE BASED UPON:
1. Quiz may/may not be announced
2. Examinations
3. Assignments
4. Comprehensive Final

ASSIGNMENTS:

1. Perform functional & environmental assessment on fellow student with Day in the Life mock injury from Gait.
2. Class presentation on one of the following topics: Topics will be drawn.
   A. Age appropriate functional goals and expectations
   B. Age appropriate learning and teaching strategies
   C. Discharge concerns for each age group
   D. Risk factors and safety issues
   E. Treatment considerations
3. Develop and provide community inservice on an area of interest or need for middle or late adults.
4. Conduct an interview with late adults to include activity level, functional abilities, BADL and IADL’s, social/community interests, architectural barriers. Compare findings with class
5. Reaction paper on findings from late adult interview.
6. Paper: Given a case scenario of injury, demonstrate understanding and implications of injury on the late adult you interviewed to include: architectural barriers, patient education, discharge plans, equipment needs, HEP, safety issues, assistance needs, orthotic or A.D. needs, and realistic functional goals.
7. Reaction to Intro to Aging Game.

DROP DATE: The last day to drop this class with a “W” is November 4, 2005.
PTA PROGRAM POLICIES & PROCEDURES
Please see the current Physical Therapist Assistant Program Student Policy & Procedure Manual for the following Policies and Procedures:

• Grading Scale
• Rounding
• Lab Practical Examinations
• Clinical Prerequisite
• Clinical Competency Examination
• Final Examination
• Participation Informed Consent
• Lab Attire
• Make-up Policy
• Quizzes
• Test & Presentation
• Attendance Policies
• Use of Off-Site Laboratory Facilities
• Open Lab
• Infection Control
• Use of Equipment & Equipment Safety
• Standards of Ethical & Legal Conduct
• Students with Disabilities
• Academic Dishonesty & Student Conduct

Unless otherwise indicated in this syllabus these policies are in effect for this course as written in the current PTA Program Student Policy & Procedure Manual.

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

1. Be familiar with a variety of functional assessment tools used to assess IADL’s, BADL’s, and architectural barrier and with type assessment tool, rating systems, and areas assessed.

2. Demonstrate knowledge of the physical changes (to include skeletal, muscular, cardiopulmonary, nervous, sensory, and vital signs), cognitive changes, functional changes and psychosocial changes across the lifespan for each developmental stage and their impact on treatment.

3. Given a case study of a school age child, adolescent, young adult middle adult and/or late adult.
   a. Assess the treatment implications/considerations based on the physical, cognitive and psychosocial changes. Provide rationale.
   b. Assess the functional expectations appropriate for their developmental stage and how this impacts Physical Therapy treatment considerations. Provide rationale.
   c. Assess and recommend appropriate learning/teaching strategies. Provide rationale.
d. Develop appropriate guidelines for patient education and discharge considerations.
e. Assess risk factors and make recommendations for prevention programs, and treatment strategies based on physical, cognitive and psychosocial changes.
f. Provide examples of treatment strategies to prevent or address risk factors. Defend your rationale.
g. Assess the impact of physical, cognitive and psychosocial issues on discharge planning from a PT perspective.
h. Examine individual and cultural differences in social/functional expectations affect treatment and discharge planning.
i. Develop an appropriate HEP program utilizing knowledge on physical, cognitive, and psychosocial, changes.
j. Assess appropriate action to take given vital sign measurements.

4. Demonstrate age appropriate communication skills and professional behavior with a variety of age groups across the life span
5. Develop and provide a community presentation on a topic appropriate for middle to late adults.
6. Administer standardized and non-standardized questionnaire.
7. Compare and contrast functional expectations that are the same for all stages and functional expectations specific to one or more stages.

MODULE OBJECTIVES:
Module 1:

1. Define function from a life span perspective
2. Describe the 3 domains of function and explain their correlation with each other in determining functional ability.
3. Identify the 5 components of physical function, which effect the quality of movement.
4. Define developmental stage.
5. Examine issues related to functional abilities across the life span.
6. List the 7 developmental stages across the life span according to Erickson.
7. Assess the impact of genetics, maturation, environment, and culture on development.
9. Discuss social theories and examine their effect on function and treatment implications/considerations.
10. Examine a variety of functional assessment tools to include the FIM, Barthel, Katz OASIS, SF37 Physical and Role Function.
11. Examine the FIM (Functional Independence Measure) and utilize the rating system given a mock patient/case history.
12. Differentiate between IADL and BADL’s across the life span
13. Identify Erickson’s eight stages of development, and assess their impact on teaching strategies and treatment implications.
14. Differentiate between functional assessment tools for the following: type tool, how it assesses, areas assessed, validity and reliability.
15. Describe the purpose of functional assessment.
17. List and describe the 5 different rating systems that may be used in an assessment tool.
18. Describe the rating system utilized in the FIM.

Module 2 Pediatrics
1. Outline the basic growth and development during the embryonic stage and the fetal stage.
2. Describe the effects of genetics and environment during the prenatal growth and development.
3. Describe the general concepts of growth and development to a child’s fine and gross motor development in the following terms:
   - Ordered sequence of events
   - Individual rates
   - Cephal/caudal
   - Proximal/distal
   - Mass movements of isolated movements
   - Overlapping of stages
   - Reciprocal interweaving
4. Demonstrate, identify and/or describe normal gross motor development stages during the first 5 years of life.
5. Differentiate between a reflex and a reaction.
6. Identify and describe the following reflexes.
   - ATNR
   - STNR
   - Galant
   - TLR
   - Palmar Grasp
   - Plantar grasp
   - Rooting
   - Moro
   - Startle
   - Positive support
   - Stepping
7. Demonstrate and describe the components of the following reactions:
   - Righting
   - Landau
   - Tilting
   - Protective extension
   - Postural support
   - Staggering
8. Discuss the following: development of prehension in an infant in the first year; development of normal oral motor development in the first year; proper sequence
of a set of gross motor skills in the correct order; progression of stair-climbing, running, and skipping.

9. Develop an age appropriate home/play activity for the following: Toddlers (1-2 years) and Pre-School (3-4) incorporating their physical, cognitive, and social abilities.

10. Develop an age appropriate sensori-motor activity for the following age groups incorporating their physical, cognitive, and social abilities.

11. During an on-sight observation, demonstrate appropriate skills to develop cooperation with a patient in two different age categories of infancy and pre-school.

Module 3 School Age, Adolescent, Early Adult

1. Identify the physical changes (to include skeletal, muscular, cardiopulmonary, nervous, sensory, and vital functions), cognitive changes and psychosocial changes of school age children, adolescents, and young adults.

2. Given a case study of a school age child, adolescent and/or young adult:
   a. Assess the treatment implications/considerations based on the physical changes associated with their developmental stage. Provide rationale.
   b. Assess the functional expectations appropriate for their developmental stage and how this impacts Physical Therapy treatment considerations when working with a patient in one of these developmental stages. Provide rationale.
   c. Assess and recommend appropriate learning/teaching strategies. Provide rationale.
   d. Develop appropriate guidelines for patient education and discharge considerations
   e. Assess risk factors, prevention programs, and treatment strategies based on physical, cognitive and psychosocial changes for each developmental stage
   f. Provide examples of treatment strategies to prevent or address risk factors. Defend your rationale.
   g. Assess the impact of physical, cognitive and psychosocial issues on discharge planning from a PT perspective.
   h. Examine individual and cultural differences in social and functional expectations and their impact on treatment and discharge planning.
   i. Develop a HEP program.
   j. Assess appropriate action to take given vital sign measurements.
   k. List and/or describe BADL’s and IADL’s for each developmental stage and the BADL’s and/or IADL’s addressed by Physical Therapy.

3. List normal ranges for vital signs.

4. Given a scenario, assess appropriate action for PTA to take if vital signs are not within normal ranges.
Module 4: Middle and Late Adults:

1. Identify physical changes (to include skeletal, muscular, cardiopulmonary, nervous, sensory, and vital functions), cognitive changes and psychosocial changes of the middle and late adults.
2. Identify physical changes in middle and late adults, which impact their ability to transfer and ambulate safely and independently. Recommend physical therapy interventions to improve safety and functional ability as it relates to transfers and ambulation. Provide rationale for your position.
3. List energy conservation techniques.
4. List safety recommendations.
5. List and/or identify BADL’s and IADL’s common to the middle and/or late adult and the BADL’s and/or IADL’s addressed by physical therapy.
6. Identify the recommended protocol for strengthening and stretching of the middle and late adults.
7. Assess personal biases toward people in the late adult stage of the life span. Determine if these biases are based on assumptions or actual documented physical, cognitive, and psychosocial factors associated with normal aging.
8. Identify visual and sensorimotor changes in the late adult and assess their impact on a patient’s functional abilities and safety.
9. Describe typical gait adaptations in middle and late adults and assess their impact on functional ability and safety.
10. Given a case study of a middle to late adult utilize knowledge on the physical, cognitive, and psychosocial changes to:
   a. Assess the treatment implications/considerations based on the physical changes associated with their developmental stage. Provide rationale.
   b. Assess the functional expectations appropriate for their developmental stage and how this impacts Physical Therapy treatment considerations when working with a patient in one of these developmental stages. Provide rationale.
   c. Assess the teaching/learning strategies appropriate for middle to late adults. Provide rationale.
   d. Assess risk factors, prevention programs, and treatment strategies based on physical, cognitive and psychosocial changes for middle to late adults.
   e. Assess architectural barriers and safety risks and provide recommendations to improve function or safety.
   f. Provide examples of treatment strategies to prevent or address risk factors. Defend your rationale.
   g. Assess the impact of physical, cognitive and psychosocial issues of middle and late adults on discharge planning from a PT perspective.
   h. Examine individual and cultural differences in social expectations of middle and late adults which could affect discharge planning.
   i. Provide recommendations for energy conservation.
   j. Develop a HEP program following guidelines for strengthening and stretching for the middle to late adult.
   k. Provide recommendations for equipment.
1. Treatment strategies to meet PT goals within POC
   m. Assess appropriate action to take given vital sign measurements for the middle or late adult.

11. Assess possible causes of changes in the gait of middle and late adults.
    Recommend 2 treatment strategies to address.
12. Perform patient interview with a middle or late adult to assess BADL’s and IADL’s, and architectural barriers utilizing patient interview form developed by class, FIM, and environmental assessment form.
13. Based on middle or late adult interview assess how individual differences effect discharge planning.
14. Given a case scenario, assess implications on the middle or late adult you interviewed and make recommendations to include: equipment needs, discharge considerations, risk factors, discharge placement, ADL’s, safety issues, energy conservation techniques, architectural barriers, and a HEP.
15. Develop a community presentation for middle or late adults which will provide education on an issue or need related to their developmental stage based on knowledge of the physical, psychosocial and cognitive changes associated with normal aging.
16. Provide a community presentation to middle or late adults appropriate to their developmental stage.
17. Demonstrate age appropriate communication skills and professional behavior during community presentation.
18. Administer standardized and non-standardized questionnaires to mock patients and/or during your middle to late adult during the interview.
19. Provide a community presentation to middle or late adults based on an issue or need you identified related to their developmental stage.
20. Demonstrate age appropriate communication skills and professional behavior during community inservice presentation.
21. List normal ranges for vital signs.
22. Add Differentiate b/n the following visual changes: macular degeneration, retinal tears, diplopia, presbyopia Diabetic Retinopathy, cataractgs, glaucoma and assess implications for PT when working with the patient. To include: format for HEP, safety recommendations/issues, treatment implications, and learning strategies.
PROPOSED CLASS SCHEDULE

The instructor reserves the right to make necessary changes in this syllabus as deemed necessary to accomplish the course objectives. It is the responsibility of the student to stay abreast of any changes that are implemented in an effort to improve the quality of the educational experience.

Week 1
Reading: Development through the Lifespan, Chapter 1
Physical Rehabilitation & Assessment, Chapters 11, 12
Assignments: Utilize functional & environment assessment on mock patient during Day in the Life

Week 2
Topic: Neonatal Development, Patterns of Development, Reflexes and Reactions
Reading: Chapter 3 in Clinical Pediatric Physical Therapy

Week 3
Topic: Components of Normal Movement
Reading: Handouts

Week 4
Topic: Gross Motor Development through adolescence; Demonstrations, and review for test
Reading: Handouts

Week 5
Topic: EXAMINATION Pediatric Development

Week 6
Topic: School age, adolescent physical changes psychosocial issues, cognitive development, learning strategies
Reading: Development Through the Lifespan: chapters 9-12
Assignment: Develop appropriate assessment tools for school age children

Week 7
Topic: Quiz Physical Systems
Young adult physical changes, psychosocial issues, cognitive development, risk factors, safety issues, social and community ADL’s
Reading: Development Through the Lifespan: Chapters 13,14
Assignment: Case studies, discussion on impact of physical changes, psychosocial, and cognitive issues on treatment implications, learning/educational strategies, functional abilities, and social/community expectations.
Week 8
Topic: EXAMINATION SCHOOL AGE, ADOLESCENT, AND YOUNG ADULT
Visual impairment issues of the middle and late adult
Reading: Development Through the Lifespan: Chapters 15, 16

Midterm Conference: October 13, 2005

Week 9
Topic: Middle Adult psychosocial issues, cognition, and learning strategies, physical changes and visual impairment in the middle and late adult
Reading: Development Through the Lifespan: Chapters 15, 16
Assignment: Case studies, discussion on impact of physical changes, psychosocial, and cognitive issues on treatment implications, learning/educational strategies, functional abilities, and social/community expectations.

Week 10
Topic: EXAMINATION MIDDLE ADULT AND VISUAL IMPAIRMENT
Intro to Aging Game
Assignment:
1. Reaction paper to aging game, Due week 11
2. Develop questionnaire for interview with middle/late adult. Due week 11

Week 11
Topic: Late adult psychosocial issues, cognitive changes, physical changes, functional abilities, community expectations, economic considerations
Reading: Development Through the Lifespan: Chapters 17, 18

Week 12
Topic: Late Adult Health and Fitness
Reading:
Assignment:
1. Presentation on middle to late adult interview.
2. Assess impact of specific injuries to the person you interviewed.
3. Develop community in-service and present it to the class. Due week 14

Week 13
Topic: Late adult gait patterns, possible causes and treatment implications.
Reading: Handout
Assignment: Provide feedback on in-service
Week 14

Happy Thanksgiving

Week 15
Topic: Presentation comparing and contrasting treatment considerations, learning strategies, and psychosocial issues across all of the developmental stages. Discuss risk factors, architectural barriers, etc.
Assignment: Perform Community In-service

Week 16
Topic: COMPREHENSIVE FINAL EXAMINATION
December 9, 2005 @ 9:30

Final Conference: December 14, 2005 @ 1:30
NWACC PTA Program
PHTA 2252 Lifespan
Fall
Check Off

Name:________________________________Date:_________________________

Please initial and date the following Functional Assessment Instruments after reviewing each one.

_____FIM

_____SIP (affective function)

_____Barthel Index

_____SF36 Physical and Role Function

_____Katz

_____Oasis

Environmental Assessment:

_____  Home Assessment Form (Chapter 12, Appendix A, O'Sullivan)
Syllabus Confirmation

I have reviewed the syllabus for the following class with my instructor:

PHTA 2252 Lifespan

I have been given the opportunity to ask questions about the syllabus. I understand that the instructor reserves the right to make necessary changes in this syllabus as deemed necessary and that is my responsibility to stay abreast of any changes that are implemented.

____________________________________________ ______________________
Name Date