Oakland University School of Nursing

Advanced Pediatric Pathophysiology

NRS 6617
CRN #14334
Faculty:

CAROLYN TIEPPO, DNP, RN, CPNP-PC
Director of Undergrad Programs and
Special Instructor

COURSE NUMBER:	**NRS 6617 (604) – CRN #14334**		
		Total Hours	
CREDIT & HOUR	**Credits**	**(Hrs/Wks)**	**Semester**
ALLOCATION:	**3**	**3 X 14**	**42**

COURSE TITLE: **Advanced Pediatric Pathophysiology**

CLASS TIME **Thursday, 5:30 pm – 7:10 pm**
& LOCATION: **South Foundation Hall 173 (SFH)**
January 3, 2018 – March 25, 2018

FACULTY OF RECORD: **Carolyn Tieppo, DNP, RN, CPNP-PC**
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PREREQUISITE and/ or COREQUISITE

Prerequisite: NRS 6411 (611)

COURSE OVERVIEW

The course focuses on the physiological and pathologic development of the pediatric client from conception to adulthood. The pediatric client is viewed as a multidimensional being in dynamic interaction with the family and the environment. Students examine the response of pediatric clients in common illness and disease states. Psychosocial, developmental, and cultural stressors and the impact on development is analyzed.

COURSE OBJECTIVES

1. Compare and contrast the interrelationships of organ systems, considering the pediatric patient in various states of normal physiology, illness, and disease.

2. Analyze the pathophysiologic concepts relative to adaptive and developmental processes to understand normal pediatric physiology and pathophysiology.

3. Predict expected clinical manifestations, appropriate diagnostic procedures and treatment principles for alterations in physiology by using knowledge of normal pediatric physiology.

4. Synthesize and incorporate nursing research in the study of pediatric physiology and alterations of pathophysiologic phenomena.

5. Examine physiologic concepts relative to adaptive processes to analyze normal pediatric physiology related to growth and development.

ESSENTIAL CONTENT

Alterations of Normal Development

Alterations of Neurological Function

Alterations of Hematologic Function

Alterations of Cardiovascular Function

Alterations of Pulmonary Function

Alterations of Renal and Urinary Tract

Alterations of Gastrointestinal/Digestive

Alterations of Musculoskeletal Function

Alterations of the Integument

TECHNICAL REQUIREMENTS

All e-Learning courses at Oakland University are delivered using a learning management system called Moodle that allows instructors to design entire courses online or to enhance a classroom-based course. The Moodle software resides on a server allowing students to access it via a web browser, e.g. Mozilla, Firefox. Each course is uniquely designed by the instructor who may include some of the following components in his/her web-based or web enhanced course: course syllabus, course material/content, course assignments, quizzes/tests, hyperlinks to other websites on the Internet and/or other OU web pages, discussion boards, Internal email, and the course grade book.

Logging into Moodle
Students login to Moodle with their NetID (oakland.edu email) account password. Please remember that anytime you change your NetID password, it will be reflected in your Moodle login.

- Open the Moodle Login page: https://moodle.oakland.edu
- Log-in using the first part of your NetID username and password, e.g. if your email is jwilson3@oakland.edu then:
    - Username: jwilson3
    - Password: whatever your Oakland University email password is

If you have any problems/issues with Moodle, you need to contact or fill out a help desk request form for e-Learning and Instructional Support.

To view course materials in MOODLE you will need the latest version of Adobe Reader that can be downloaded free of charge at www.adobe.com

COURSE OUTCOMES

By the end of the course, students will be able to:
- ❖ Recognize normal and expected growth and development of the infant, toddler, school-age, adolescent and young adult.
- ❖ Identify abnormal growth patterns and the correlation with disease.
- ❖ Describe signs and symptoms of disease states in the pediatric patient.
- ❖ Identify common diseases associated with pediatric primary care.
- ❖ Recognize assessment findings suggesting alternations in growth and development.
- ❖ Recognize assessment findings suggesting pediatric disease.

READINGS & REQUIRED TEXTS

REQUIRED TEXT:
- McCance, K. & Heuther, S. (2014). *Pathophysiology: The biologic basis for disease in adults and children,* 7th ed. St. Louis, MO: Elsevier Mosby.

RECOMMENDED TEXTS:
- Duderstadt, K.G. (2014). *Pediatric physical examination, an illustrated handbook*. St. Louis: MO: Elsevier.
- Hagan, J. F., Shaw, J. S., & Duncan, P. M. (2017). *Bright futures: Guidelines for health supervision of infants, children, and adolescents, 4th ed*. Elk Grove Village, IL: American Academy of Pediatrics

GENERAL COURSE INFORMATION:

Oakland University and the School of Nursing Information:
Oakland University and the School of Nursing follow the academic calendar as described by Oakland University - Office of the Registrar. Policies and procedures specific to Oakland University Graduate Catalog and policies and procedures specific the School of Nursing (SON) can be found in the SON Graduate Handbook. Both publications will be followed in the course.

Faculty Communication:
I routinely check the course mail on Moodle however please allow up to 48 hours for a response. Questions, clarifications or other information not found in the syllabus should be sent through the course mail. My preferred and best method for routine course contact is through the course email (Moodle course site). For emergency contact only, please use: cktieppo@oakland.edu. All communication from faculty will be through the Moodle email or Moodle News Feed (which generates an auto email to your University email account). Please be aware that the use of a personal email account will result in a lack of faculty response.

Faculty Office Hours:
Meetings are scheduled by appointment on a first come, first serve basis. Faculty will be available for both, face to face and/or online (WebEx) meetings before and after most scheduled class time. Other times are available but must be arranged in advance.

Progression and Success:
It is my goal to help each student achieve success in the course and meet the objectives however it is also the student's responsibility to contact the Faculty of Record to discuss progression concerns. Any student receiving a failing grade should contact the Faculty of Record.

CLASS FORMAT

NRS 6617 is an interactive partially online course and approximately half the sessions are synchronous and/or face to face. The design of the course activities requires individual preparation for online activities. The class schedule is posted in a weekly format on Moodle. In addition to the syllabus, assigned readings, course assignments and general information, including updates, will be available on the Moodle course site. Changes to the schedule may occur to accommodate unforeseen circumstances and any change will be clearly communicated either through course email, forum post, and/or as an announcement during a scheduled course meeting. In addition to required assigned textbook reading, many weekly readings will be posted in Moodle (PDF form) which are also considered required. Readings which are recommended support understanding of the course content and are posted under *Recommended* on the course Moodle page in a weekly format.

TECHNICAL SKILLS REQUIRED

For your success, you should have a moderate level of computer proficiency. You should already be comfortable doing all of the following:
- ❖ Using a chosen computer operating system and a web browser
- ❖ Following online directions for using a new program
- ❖ Typing at least 20 words a minute
- ❖ Troubleshooting basic computer problems
- ❖ Working through problems you can't resolve on your own with remote support technicians
- ❖ Students are responsible for all content posted to the Moodle course site, including syllabi.

REQUIRED TECHNOLOGY

In order to fully participate in this course you will need:
- ❖ An internet connected computer with the most updated versions of your favorite web browser installed. Use of smartphones and tablets is not recommended.
- ❖ In the event that your computer crashes or internet goes down, it is essential to have a "backup plan" in place where you are able to log in using a different computer or travel another location that has working internet.
- ❖ Students should make sure that their computer has Word and PowerPoint for opening .doc and .ppt documents. Both will be needed throughout the course. The Adobe Reader for .pdf files may also needed.
- ❖ WebEx may be used for meetings. For additional information, please visit: http://www2.oakland.edu/elis/webex.cfm (24 hour help-line assistance). The WebEx virtual conferencing system hosts synchronous meetings. The purpose of a meeting will be to discuss questions about the course content. In order to use WebEx, you must have a computer with a microphone, updated internet browsers and updated java. WebEx is incredibly easy to use.
- ❖ Any files you intend to use for your course should be saved to a cloud solution and not to a local hard drive, USB stick or external disk. Saving files this way guarantees your files are not dependent on computer hardware that can fail.

TECHNICAL ASSISTANCE

If you have general questions about the course (such as due dates, content, etc), please contact the course facilitator. For Moodle technical issues that you cannot resolve on your own, please contact the e-Learning and Instructional Support office:
- ❖ Phone : (248) 805-1625
- ❖ Submit a help ticket : http://www2.oakland.edu/elis/help.cfm?lms=2
- ❖ If you have any trouble accessing any of the content in this course, please contact the course facilitator.

STUDENT AND TEACHER EXPECTATIONS

Students are expected to:
- ❖ Complete all reading assignments before each class
- ❖ Ensure that their computer is compatible with Moodle
- ❖ Login to Moodle 3-5 times a week; daily login is highly recommended
- ❖ Follow the calendar of events and complete all assignments by their deadline
- ❖ Respond to emails within 48 hours
- ❖ Participate in a thoughtful manner
- ❖ Respect rules of netiquette
  - ○ Respect your peers and their privacy
  - ○ Use constructive criticism
  - ○ Refrain from engaging in inflammatory comments

The teacher is expected to:
- ❖ Routine login to Moodle (Mon-Fri)
- ❖ Moderate conversations in forums
- ❖ Respond to email within 48 hours
- ❖ Review assignments within 7 days of the assignment deadline
- ❖ Post final scores of assignments in Moodle within 14 days of due date

GRADING

Graduate students in the School of Nursing are required to earn an 80% or better to pass the course. For more details, please refer to the *School of Nursing Graduate Handbook*. Discussion assignments will receive a final score (see rubric on Moodle) once the forum closes. Faculty will provide feedback at the mid-point in which the forum is open. Faculty feedback is meant to help students focus their work to achieve the assignment outcome. Quiz scores will be posted within 72 hours of the quiz closing date/time. The presentation will be scored using the Presentation rubric (see Moodle), and scores will be provided within one week of the presentation/due date.

COURSE EVALUATION METHODS

Introduction/Introductory Forum:
This introduction assignment is a mandatory assignment in this course. You are free to share as much about yourself as you would like however in order to receive points, a minimum set of conditions must be met:
- Your post is completed before during the first week of classes (before the second week of our scheduled class).
- Describes your past and/or current experience as a nurse as it relates to pediatric patients.
- Describe what you hope to gain from this course.
- Have discussion with others in the forum.

Online Topic Discussions:
Two (2) Discussion assignments will be offered electronically (on Moodle) in a discussion format with the purpose of peer communication and application of evidence. A topic will be posted by the Faculty of Record (FOR) and each student is required to provide an evidenced based response to the topic. Discussion among students is expected and a minimum of one evidenced based peer discussion response is required to earn points for your response to the forum question/topic. Sources must be cited in APA format at the end of each post to earn credit for the post/response. Quality and accuracy of information will be considered in the overall score. It is expected that each student routinely checks the forum for updates. Point deductions will occur for unanswered peer or faculty questions. Please see the Discussion Scoring Rubric for point earning. *Any initial or 'first' post to a forum that is not a response to the discussion topic will result in a score of 0.0 (zero).* The rules of "netiquette" apply including refraining from inflammatory, trolling or provoke negative replies.
Course Objectives 1, 2, 3, 4 & 5

On-line quiz/examination/test:
Four online quizzes will be given during the semester and quizzes/examinations are mandatory. The quiz will be available on-line in accordance with the course calendar. The test will not be available to students after the due date. Students will have approximately 60-90 seconds per question and self-monitoring of time is expected in order to complete all questions. Once the quiz is opened, it must be completed within the time permitted on the first attempt unless otherwise indicated in the instructions. The quiz cannot be re-opened for completion at a later time unless otherwise indicated.

Alternate examination times are not offered to accommodate social/personal or work commitments. Any student who is unable to take a quiz must contact the Faculty of Record (FOR) prior to scheduled quiz time. Documentation must be provided for the FOR to consider the circumstance and the FOR reserves the right to determine whether to administer an alternative quiz or assignment equivalent to the missed quiz. A score of zero (0) will be earned when the student does not communicate with the faculty *prior* to the examination time. Grading is consistent with the Oakland University Graduate Grading Scale. Percentages are converted appropriately. Grades/scores are not rounded up.
Course Objectives 1, 2, 3 & 5

Presentation Assignment:
The presentation is a combination of written work and oral presentation (see Moodle for more details). The purpose of this assignment is to bridge the knowledge of pediatric normal growth development with advanced pediatric pathophysiology, and transition to advanced pediatric health and physical assessment.
Course Objectives 4 & 5

Overall Evaluation Methods

Introductory Forum	10 points
Test/quiz/examination 1	20 points
Test/quiz/examination 2	20 points
Test/quiz/examination 3	20 points
Test/quiz/examination 4	30 points
Discussion Assignment I	15 points
Discussion Assignment II	15 points
Presentation (15 oral/15 written)	30 points
Total	*160 points*

APA WRITING EXPECTATIONS

The American Psychological Association 6th edition (2009) format will be expected for written assignments and reference citations of sources. Header, cover page and pagination are not possible using forums but will be expected in written work submitted as a file.

Electronic work is expected to have double space, Times New Roman, 12 point font, and APA reference formatting throughout the body. Academic essays also focus on the following:

1. Use essay structure (i.e., introduction, body, and conclusion).
2. Organize your ideas into paragraphs, and write in complete sentences.
3. State your thesis in the introduction of the essay.
4. Use 3rd person perspective (i.e., specify the subject of every sentence).
5. Spell out each word (when using acronyms, spell them out the first time).
6. Follow APA style for citations, references, and format.
7. Analyze the concepts and theories, and support your analysis with logical arguments, specific examples, and citations from other sources.

EXTRA CREDIT

Extra credit is not offered on an individual basis. Any extra credit opportunity will be offered to every student in the course. Extra credit is offered at the discretion of the faculty and criteria for earning extra credit points will be clearly posted on Moodle. Extra credit points will not factored into any final course grade unless the student has earned a minimal passing grade in the course. *Any students who has not earned the minimal points required to pass the course per the Graduate Handbook will not be permitted to pass the class through extra credit points.*

LATE SUBMISSIONS

The FOR has the right to refuse to accept any late assignments. Discussion assignments which consist of multiple posts may not be able to earn points unless the FOR has approved the request

in advance. Failure to complete the entire assignment will result in the forfeiture of the points linked to the missing post since make-up of peer discussion cannot be completed once the forum has closed. The due dates for all assignments are posted on Moodle and will be considered late one day if submitted after the due date and the late status will recur every calendar day thereafter. If you are unable to submit the assignment by the due date, you are required to notify faculty in advance. Notification does not automatically override the late submission point deduction. A ten percent (10%) point deduction will be earned for each calendar day an assignment is late, if late submission has been approved by the FOR. The calendar day begins immediately after the due date and time. Electronic assignments must be submitted in a format that can be opened and graded by faculty.

All tests/quizzes/examinations are mandatory. If a student fails to take the quiz in the allotted timeframe, the student will receive a zero for that quiz unless a previous arrangement has been made with the FOR. For a serious and irresolvable conflict with an exam or quiz date, you must contact faculty **in advance** to discuss whether there are possible alternatives. Personal travel and work commitments (with the exception of governmental mandatory assignments) scheduled when classes are in session (see the Oakland University Academic Calendar) will not be given consideration for alternate arrangement. All requests must be submitted with supporting documentation describing the conflict. A medical emergency that occurs on the very morning of an exam (such that advance notification is impossible) must be formally documented in order for alternate arrangements to be considered. It is the student's responsibility to contact the course faculty.

COURSE CALENDAR

All course activities including assigned readings, weekly activities, assignments and quizzes can be found on the Moodle course page.

Please note: This calendar is tentative - activity instructions could change as the semester progresses and will be posted to the News forum along with amended syllabus. The weekly information combined with the activities are designed to take a minimum of 9 hours per week of depending upon your learning needs. Some weeks, including the presentation project, may take much more time to adequately prepare.

Week & Date	Task
Week 1 Jan 4	**COURSE INTRODUCTION: ONLINE, Self-paced** **Reading Assignment: Review all content in Syllabus Part A & Part B** **Course Introduction: Introductory Forum, Q & A, Course Overview** **Assignment:** Review Syllabus Part A, Syllabus Part B, and Introductory Forum. Also review past pathophysiology and pharmacology courses as this course builds upon that content and is meant to prepare you for advanced health assessment course which includes the pediatric population. **ASYNCHRONOUS ONLINE**
Week 2 Jan 11	**Topic: GROWTH & DEVELOPMENT I** Fetal Development, Infant, Toddler McCance & Heuther: pages 184-189 **ASYNCHRONOUS ONLINE**
Week 3 Jan 18	**Topic: GROWTH & DEVELOPMENT II** McCance & Heuther: Chapter 20, page 660 School age/Adolescent/Young Adult **FACE TO FACE**
Week 4 Jan 25	**QUIZ I** **SYNCHRONOUS ONLINE**
Week 5 Feb 1	**HEENT** McCance & Heuther: Pg 506-517 **ASYNCHRONOUS ONLINE**
Week 6 Feb 8	**RESPIRATORY** **CIRCULATORY** **FACE TO FACE** McCance & Heuther: Chapter 36, page 1290 & Chapter 33, page 1194
Week 7 Feb 15	**LYMPHATIC SYSTEM** **IMMUNE SYSTEM** **INTEGUMENTARY SYSTEM** **ASYNCHRONOUS ONLINE** McCance & Huether: Chapter 47, page 1653

Feb 22	**WINTER BREAK**
Week 8 March 1	**QUIZ II** **SYNCHRONOUS ONLINE**
Week 9 March 8	**DIGESTIVE SYSTEM** McCance & Huether: Chapter 42, page 1486
Week 10 March 15	**HEMATOLOGIC SYSTEM** McCance & Huether: Chapter 30, page 1055
Week 11 March 22	**RENAL/UROLOGIC SYSTEM** McCance & Huether: Chapter 39, page 1376
Week 12 March 29	**QUIZ III**
Week 13 April 5	**ENDOCRINE SYSTEM** **REPRODUCTIVE SYSTEM** McCance & Huether: Chapter 30, page 1055
Week 14 April 12	**MUSCULAR, SKELETAL, & NERVOUS SYSTEMS** McCance & Huether: Chapter 45, page 1591 **PRESENTATIONS: On campus**
Week 15 April 19	**QUIZ IV (Final Quiz)**

GRADUATE GRADE CONVERSION SCALE

PERCENTAGE	GPA	PERCENTAGE	GPA
99.00 - 100	4.0	80.00 - 80.99	3.0
97.00 - 98.99	3.9	78.00 – 79.99	2.9
95.00 - 96.99	3.8	76.00 – 77.99	2.8
93.00 - 94.99	3.7	74.00 – 75.99	2.7
91.00 - 92.99	3.6	72.00 – 73.99	2.6
89.00 - 90.99	3.5	70.00 - 71.99	2.5
87.00 - 88.99	3.4	68.00 – 69.99	2.4
85.00 - 86.99	3.3	66.00 – 67.99	2.3
83.00 - 84.99	3.2	64.00 – 65.99	2.2
81.00 - 82.99	3.1	62.00 – 63.99	2.1
80.00 - 80.99	3.0	60.00 – 61.99	2.0