

# **Oakland University School of Nursing**

## **Pathophysiology for Adult Health and Illness**

**NRS 6411 (611)  
CRN #13680**

**Faculty:**

**Renee Mirovsky, DNP, RN, ANP-BC  
Adjunct Full Time Instructor**

**Winter 2018**

<b>COURSE NUMBER:</b>	<b>NRS 6411 (611) – CRN #13680</b>		
<b>CREDIT &amp; HOUR ALLOCATION:</b>		<b>Total Hours</b>	
	<b>Credits</b>	<b>Hrs/Wks</b>	<b>Semester</b>
	<b>3</b>	<b>3 x 14</b>	<b>42</b>
<b>COURSE TITLE</b>	<b><u>Advanced Pathophysiology For Health and Illness Across the Lifespan</u></b>		
<b>CLASS TIME &amp; LOCATION:</b>	<b><u>January 3, 2018 – April 25, 2018</u></b>		
	<b><u>Tuesday 5:30-7:10 pm – 364 South Foundation Hall</u></b>		
<b>FACULTY OF RECORD:</b>	<b><u>Renee Mirovsky, DNP, RN, ANP-BC</u></b>		
	<b><u>Full Time Adjunct Instructor</u></b>		
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### **COURSE OVERVIEW**

This course focuses on the human as a multidimensional being in dynamic interaction with the environment. The approach to physiological phenomena is nursing focused. Students examine human physiological response in common health, illness and disease states. In addition, the interaction of physiological response with selected psychosocial, situational, and cultural stressors is analyzed.

### **COURSE OBJECTIVES**

1. Identify regulatory and compensatory mechanisms as they relate to commonly occurring diseases. (I, VIII, IX)
2. Examine current and emerging genetic/genomic evidence in pathophysiologic processes. (I, IX).
3. Predict expected clinical manifestations, appropriate diagnostic procedures and pathophysiologic basis for treatment principles of major health diseases. (I, VIII, IX)

### **ESSENTIAL CONTENT**

Nature of Health and Illness

Cellular injury

Genetic Influences

Adaption with Stress and Disease

Immunocomptence and Infection

### **ESSENTIAL CONTENT (cont'd.)**

Reproductive

Endocrine

Cardiovascular

Pulmonary

Digestive

Renal/Urologic

Musculoskeletal

Hematologic

Neurologic

Neurobehavior

Integument

Pain and CNS response

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**TOPICAL OUTLINE**

<b>DATE</b>	<b>TOPIC</b>	<b>Activities</b>
Week One  <b>Jan 3 – Jan 6</b>	A. Cellular injury B. Nature of Health C. Nature of Illness D. Stress and Disease	Chapter 1 & 4 read for review Chapters 2, 6, 11
Week Two  <b>Jan 7 – Jan 13</b> <b>Meet in class Jan 9</b>	Complete: A. Cellular injury B. Nature of Health C. Nature of Illness D. Stress and Disease E. Sensory, pain, temperature & sleep.	Chapters 2, 6 & 11, 16  <b>Course orientation</b> <b>Syllabus review</b> <b>Class discussion</b>
Week Three  <b>Jan 14 – Jan 20</b>	Immunocompetance and Infection A. Immunity B. Inflammation C. Infection	Chapters 7-10  <b>Journal entry #1</b>
Week Four  <b>Jan 21 – Jan 27</b>	The Reproductive System A. Female B. Male C. Sexually Transmitted Infections	Chapters 23-26  <b>Discussion forum/case study #1</b>
Week Five  <b>Jan 28 – Feb 3</b>	The Endocrine System A. Hormone regulation B. Thyroid disorders C. Parathyroid disorders D. Diabetes E. Adrenal function	Chapters 21 & 22  <b>Exam #1 (week 1-4)</b> <b>Tuesday Jan 30</b> <b>Open from 5:00 pm – 12:00 am</b>
Week Six  <b>Feb 4 – Feb 10</b> <b>In class Feb 6</b>	The Cardiovascular System A. Disorders of circulation. B. Diseases of the heart C. Diseases of the veins D. Diseases of the arteries E. Exercise physiology	Chapters 31 & 32  <b>In class discussion with case study &amp; group quiz</b>

<p>Week Seven</p> <p><b>Feb 11 – Feb 17</b></p>	<p>The Pulmonary System</p> <p>A. Disorders of the chest wall.</p> <p>B. Pulmonary Disorders</p> <p>C. Dyspnea</p> <p>D. Malignancies of the respiratory tract.</p>	<p>Chapters 34 &amp; 35</p> <p><b>Journal entry #2</b></p>
<p>Week Eight</p> <p><b>Feb 26 – Mar 3</b></p>	<p>The Digestive System</p> <p>A. Disorders of the GI tract</p> <p>B. Disorders of accessory organs.</p> <p>C. Cancer of the digestive tract</p> <p>D. Nutrition physiology</p>	<p>Chapters 40 &amp; 41</p> <p><b>Discussion forum/case study #2</b></p>
<p>Week Nine</p> <p><b>Mar 4 - 10</b></p>	<p>The Renal &amp; Urologic System</p> <p>E. Fluid, electrolytes, acids &amp; bases.</p> <p>F. Kidney disorders</p> <p>Urinary tract disorders</p>	<p>Chapters 3, 37 &amp; 38</p> <p><b>Journal entry #3</b></p>
<p>Week Ten</p> <p><b>Mar 11 – Mar 17</b></p>	<p>The Musculoskeletal System</p> <p>E. Bone and joint function</p> <p>F. Disorders of the bone</p> <p>G. Disorders of the joints</p> <p>H. Disorders of skeletal muscle</p> <p>I. Musculoskeletal injuries</p>	<p>Chapters 43 &amp; 44</p> <p><b>Exam #2 (weeks 5- 9)</b>  <b>Tuesday Mar 13</b>  <b>Open from 5:00 pm – 12:00 am</b></p>
<p>Week Eleven</p> <p><b>Mar 18 – Mar 24</b>  <b>In class Tuesday Mar 20</b></p>	<p>The Hematologic System</p> <p>A. Tumor growth</p> <p>B. Hemostasis</p> <p>C. Anemia</p> <p>D. Alterations of leukocyte and lymphoid function</p> <p>E. Alteration of platelets and coagulation</p>	<p>Chapters 12, 13, 27, 28, &amp; 29</p> <p><b>In class discussion with case study and group quiz</b></p>

<p>Week Twelve</p> <p><b>Mar 25 – Mar 31</b></p>	<p>The Neurologic System Part I</p> <ul style="list-style-type: none"> <li>A. The nervous system</li> <li>B. Altered Cognition</li> <li>C. Altered cerebral hemodynamics</li> <li>D. Altered motor function</li> <li>E. Disorders of the central nervous system</li> <li>F. Disorders of the peripheral nervous system</li> <li>G. Healing touch</li> </ul>	<p>Chapters 15, &amp; 17-19</p> <p><b>Discussion forum/case study #3</b></p>
<p>Week Thirteen</p> <p><b>Apr 1 – Apr 7</b></p>	<p>The Neurologic System Part II</p> <p>Mental Health</p> <ul style="list-style-type: none"> <li>A. Mood disorders</li> <li>B. Anxiety disorders</li> <li>C. Coping and humor</li> </ul>	<p>Chapter 19</p> <p><b>Journal entry #4</b></p>
<p>Week Fourteen</p> <p><b>Apr 8 – Apr 14</b></p> <p><b>In class Tuesday April 10</b></p>	<p>The Integumentary System</p> <ul style="list-style-type: none"> <li>A. Disorders of the skin</li> <li>B. Disorders of the hair</li> <li>C. Disorders of the nail</li> </ul>	<p>Chapter 46</p> <p><b>In class discussion with case study and group quiz</b></p>
<p><b>Final Week</b></p> <p><b>Apr 19 – Apr 25</b></p>	<p><b>Exam #3</b></p> <p><b>Weeks 10-14</b></p> <p><b>Tuesday Apr 24 5:00 pm – 12:00 am</b></p>	

Oakland University – School of Nursing				
GRADUATE GRADE CONVERSION				
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
			60.00 – 61.99	2.0

### **REQUIRED TEXTBOOKS**

McCance, K. & Huether, S. (2014). *Pathophysiology: The biologic basis for disease in adults and children* (7<sup>th</sup> ed.). St. Louis: Mosby.

### **COURSE REQUIREMENTS**

1. Students are expected to prepare for class by reading the assigned chapters as well as the additional activities provided on Moodle. This is a mostly online course with some face-to-face class time. Voice-over Powerpoint presentations will be posted for each weeks topics. Additional videos and reading may be posted for some topics to enhance understanding of key concepts. It is essential that all students participate in the face-to-face and online class discussion. Meaningful discussion only happens if you are prepared by completing the readings and online materials.
2. Course evaluation will be based on the three exams, three case studies that will be completed in a discussion forum, three in class group quizzes and 4 reflection posts. **The three exams will be given online. See outline and Moodle for dates and times.** Online exams will be application style. You may use your books to answer questions but the answer may not be immediately evident. You are to work independently on exams. IP addresses are monitored throughout the course and if it is noted that exams are taken from the same IP address this will be investigated for possible academic misconduct.

3. In class group quiz: At the beginning of each class there will be a group quiz. You will complete this in your case study groups. The quiz will be short and may contain multiple choice or essay type questions. At the conclusion of the quiz, we will review and discuss the rationale for the answers.
  
4. Case study discussion forum: There will be three case studies that will be completed in a discussion forum. Because of the large number of students in the class, you will be divided into groups for this assignment. Groups will be determined by the instructor. Each case study for each group in a given week will be identical. The purpose of the case study is to link important concepts from pathophysiology to a patient problem. The case study will be revealed in an unfolding format throughout the week. With each reveal of the case study there will also be 1-2 questions that you need to answer. Follow the directions on the question and complete the questions. You should also respond to at least one of your group members throughout the course of the assignment week. See the following rubric for more information.

Case study discussion forum rubric

Original response to each question (3)	Answer is complete and includes link to pathophysiology. May miss 1 key concept.  5 pts	Answer is not complete or does not complete link to pathophysiology. Missing 2-5 key concepts  3-4 pts	Answer is not complete, does not complete link to pathophysiology. Missing 5 or more key concepts  0-2 pts
Responses to classmates	Includes a response to an additional case study questions and adds to a meaningful discussion  5 pts	Includes a response to an additional case study question but lacks substance  2-4 pts	Does not respond to any additional case study questions  0 pts
<b>Total</b>	<b>20 pts</b>		



You should engage in a discussion about the topic that allows you to independently explore the concepts of the topic. The instructor will monitor posts throughout the week. The instructor may not respond to every post but will respond when appropriate or when it can engage further discussion on the topic. **All posts should be completed by Saturday night at 2359 of the assignment week.**

**Journal entries:** This is an online assignment for you to reflect on the topic for the previous weeks. There will be 3 questions posted. Respond to 1 or all 3 if you like. This reflection helps you link the topics we discuss in class and online with the patient problems that you see in your work or clinical experiences. Due dates are posted in the syllabus and on Moodle.

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## **COURSE EVALUATION**

You will be evaluated in NRS 611 based on the following

Exams (3) .....	30 points each
Group quizzes (3).....	10 points each
Discussion case studies (3).....	20 points each
Journal entries (4).....	5 points each
<b>Total .....</b>	<b>200 points total</b>

### **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 2 days
- 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:

- Login to the course every day (Mon-Fri)
- Moderate conversations in forums
- Respond to forum postings and email within 2 days
- Grade assignments within 7 days of the assignment deadline

**Students are expected to actively and regularly contribute to the classroom discussions. Failure to participate will be reflected in the theory grade**

The course requires an open exchange of ideas. The expectation is that all feel free to express him/herselves and have views respected. At no time can language deemed by the FOR as non-professional language or inflammatory comments be used. Any such remarks whether verbal or in writing can be considered as reason for dismissal from the course. Remember email and discussion lack inflection and expression that real conversation communicates so take care to prevent inadvertent misunderstandings. Many sources are available on the web under netiquette. Any postings within the course website considered by the FOR as inclusive of offensive language or insulting comments will be considered as grounds for dismissal from the course. Discussion forums should be used for discussion about the assignment or for its other intended purpose ONLY.

### **Academic Conduct:**

Any circumstance of academic dishonest/misconduct or suspected academic dishonesty/misconduct will be reported in accordance with the University Academic Conduct Policy. It is the student's responsibility to review this information and act in accordance. It is the expectation that each student will work independently unless a group project is assigned. All quizzes offered in this course are considered individual activities and therefore any communication, sharing ideas, sharing computers, and/or sharing working space that may compromise individual contribution during allotted quiz times will be considered academic dishonesty/misconduct, will result in a grade of zero (0) for that quiz, and will be reported to the Dean of Students Office. A final grade of Incomplete (I) will be entered if a resolution has not been determined at the time final grade are due. Substantiated allegations of misconduct will result in failure of the course and a grade of 0.0 will be entered as the earned course grade.

### **GENERAL INFORMATION**

1. To contact faculty, it is best to do so through Moodle internal email. I will respond within 48 hours Monday – Friday. I may not be available on weekends. Questions, clarifications or other information should be sent through the **course (Internal) email**. **Students are advised to review the course syllabus thoroughly and to clarify assignments early on during the course**
2. The instructor reserves the right to make changes as necessary to the syllabus. If changes are necessitated during the term of the course, the instructor will immediately notify students of such changes both by individual email communication and posting both notification and nature of change(s) on Moodle.
3. Since computer access is available worldwide, it is not expected that students will be unable to access the course site. If for some other reason a student must be unavailable for a period of time you must let the faculty know in advance. Absences from discussions or presentations will not be approved. Exam and quiz dates and times will not be changed.
4. The FOR has the right to refuse to accept any late assignments. If a late assignment is accepted a minimum of five points will be taken off the final grade for assignments 1-3 days late, 10 points for assignments 4-7 days late. Assignments more than 1 week late will not be accepted.
5. Office hours will be on Tuesday of the face-to-face class days from 1:30 – 3:30. I am available to meet at other times as well. Please email for an appointment time. All students that fail any assignment should schedule an appointment with faculty to discuss potential need for a remediation plan, and or potential impact on successful completion of the course.