Course Title:
Biological Fluids

Catalog Description:
Biological Fluids introduces the student to the practical aspects of renal physiology and the theory of urine chemical, physical and microscopic tests. In addition, analysis of other body fluids (fecal specimens, cerebral spinal fluid, seminal fluid, amniotic fluid, synovial fluid) are reviewed in the lecture portion of the class. In the laboratory, the student will perform physical, chemical and microscopic analysis on urine specimens, and analysis of other body fluids.

Prerequisites or Necessary Entry Skills/Knowledge:
Use of microscope is helpful.

FULFILLS MN TRANSFER CURRICULUM AREA(S) (Leave blank if not applicable)
☐ Goal 1: Communication: By meeting the following competencies:
☐ Goal 2: Critical Thinking: By meeting the following competencies:
☐ Goal 3: Natural Sciences: By meeting the following competencies:
☐ Goal 4: Mathematics/Logical Reasoning: By meeting the following competencies:
☐ Goal 5: History and the Social and Behavioral Sciences: By meeting the following competencies:
☐ Goal 6: The Humanities and Fine Arts: By meeting the following competencies:
☐ Goal 7: Human Diversity: By meeting the following competencies:
☐ Goal 8: Global Perspective: By meeting the following competencies:
☐ Goal 9: Ethical and Civic Responsibility: By meeting the following competencies:
☐ Goal 10: People and the Environment: By meeting the following competencies:

Topics to be Covered
Terminology associated with body fluid
Collection & transport of body fluid
Performance and analysis of laboratory procedures
Reporting of laboratory results
Mathematics and formulas used
Anatomy & physiology of kidneys
Correlation of lab results and disease
### Student Learning Outcomes

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Describe the composition, formation and functions of selected body fluids.</td>
</tr>
<tr>
<td></td>
<td>Process and analyze body fluid specimens using only necessary supplies and within a reasonable amount of time.</td>
</tr>
<tr>
<td></td>
<td>Exhibit an understanding of the anatomy and functions of the renal system.</td>
</tr>
<tr>
<td></td>
<td>Collect and perform macroscopic and microscopic analysis of urine samples within stated limits of accuracy.</td>
</tr>
<tr>
<td></td>
<td>Evaluate laboratory test outcomes and correlate test results with patient condition(s).</td>
</tr>
<tr>
<td></td>
<td>Defend the value of maintaining a safe laboratory environment.</td>
</tr>
<tr>
<td></td>
<td>Demonstrate improvement in the affective traits of organizational skills, work habits, attitude, interpersonal skills, and problem-solving ability.</td>
</tr>
</tbody>
</table>

**Is this course part of a transfer pathway:** Yes ☐ No ☒

*If yes, please list the competencies below*

Revised Date: 3/29/2022