CATALOG DESCRIPTION: Provides a systems approach to the study of the normal structure and function of the human body. Emphasis on biochemistry, cytology, histology, and the integumentary, skeletal, muscular and nervous systems. Laboratory exercise designed to reinforce content. Required of nursing intent majors. Recommended for science majors.

PREREQUISITE(S): ENG 042, or appropriate test score

COREQUISITE(S): MAT 050 or appropriate placement test score. High School Biology and/or Chemistry or equivalent highly recommended.

CREDITS: 4  HOURS: 3 lecture 3 lab


Laboratory Manual: Eric Wise
Seeley’s Anatomy and Physiology (11th Edition), 2016


SUPPLEMENTAL MATERIALS: None

INSTRUCTOR INFORMATION:

OFFICE HOURS:
LEARNING GOALS: The following general education learning goals apply and are assessed in this course: Communicate effectively in both speech and writing, Use scientific method of inquiry, through the acquisition of scientific knowledge; Understand ethical issues and situations; Address an information need by locating, evaluating and effectively using information.

LEARNING ASSESSMENT

<table>
<thead>
<tr>
<th>Student Learning Outcomes:</th>
<th>Suggested Means of Assessment:</th>
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<tbody>
<tr>
<td>Utilize the proper anatomical and directional terms addressing body structures, body systems and their locations</td>
<td>Tests, Quizzes, Assessment Tasks, Pre and Post-Tests</td>
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<tr>
<td>Identify structures of (applicable body systems).</td>
<td>Tests, Quizzes, Assessment Tasks, Practical Exams</td>
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<tr>
<td>Correlate structure and function relationships within a particular system. Integrate knowledge of anatomical and physiological functions of the entire body.</td>
<td>Tests, Quizzes, Assessment Tasks, Exams</td>
</tr>
<tr>
<td>Explain the function of the organs within a particular system and their importance to that system’s function and to maintaining homeostasis.</td>
<td>Tests, Quizzes, Class Discussions, Critical Thinking Rubrics, Pre and Post-Tests</td>
</tr>
<tr>
<td>Differeniate among various histological body tissue samples.</td>
<td>Tests, Quizzes, Lab Reports</td>
</tr>
<tr>
<td>Recognize the importance of lab safety and apply the scientific method when conducting lab experiments</td>
<td>Hands-on Tasks, Practical Exams, Performance Assessment Activities, Lab Reports</td>
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<tr>
<td>Demonstrate effective oral/written communication skills to analyze lab results</td>
<td>Participation in Class Discussions, Essay Questions, Exams, Lab Reports</td>
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<tr>
<td>Exhibit professional behaviors and follow high ethical standards</td>
<td>Team Group Lab Work for Scientific Reporting</td>
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GRADING SYSTEM:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 &lt; 100</td>
</tr>
<tr>
<td>B+</td>
<td>87 &lt; 90</td>
</tr>
<tr>
<td>B</td>
<td>80 &lt; 87</td>
</tr>
<tr>
<td>C+</td>
<td>77 &lt; 80</td>
</tr>
<tr>
<td>C</td>
<td>70 &lt; 77</td>
</tr>
<tr>
<td>D</td>
<td>60 &lt; 70</td>
</tr>
<tr>
<td>F</td>
<td>Below 60</td>
</tr>
</tbody>
</table>

DISABILITY SERVICES STATEMENT: Warren County Community College is committed to providing all students equal access to learning opportunities. Student Services is the campus office that works with students who have disabilities to provide and/or arrange reasonable accommodations. Students who have, or think they may have, a disability (e.g. mental health, learning, vision, hearing, physical or systemic), are invited to contact Student Services to arrange a confidential discussion at (908) 835-2300 or by email at StudentServices@Warren.edu as soon
as possible. Students registered for Disability Services with Student Services, who have requested accommodations for the current semester will be provided with an electronic letter detailing individual accommodations and are encouraged to contact the instructor early in the semester to discuss accommodations outlined in their letter.

INSTRUCTIONAL SUPPORT CENTER: The Instructional Support Center (ISC), located in Room 105 across from the library, provides academic support at no cost to WCCC students and is available for courses in which they are currently enrolled. The ISC is staffed with trained professional and peer tutors who are ready to help you understand and succeed. For scheduling or further information, visit the ISC in person, online at http://www.warren.edu/tutoring/ or by telephone at (908)835-2354.

STATEMENT AND POLICY ON CHEATING, PLAGIARISM AND ACADEMIC DISHONESTY: Students are required to perform all the work specified by the instructor, and are responsible for the content and integrity of all academic work submitted. A violation of academic integrity will occur if a student: (1) knowingly represents work of others as one’s own, (2) uses or obtains unauthorized assistance in any academic work, (3) gives fraudulent assistance to another student, or (4) furnishes false information or other misuse of college documents.

In cases of suspected violation of academic integrity, the incident is to be reported to the Office of Academics. A student found guilty of violating the rule of academic integrity by the Vice President of Academics will be considered to have failed in personal obligation to the College; such failure will be subject to disciplinary action by the College. Unless otherwise notified, the instructor will allow students who are pending disciplinary action to attend class.

REQUIRED FORMAT FOR RESEARCH PAPERS: Research papers written for any Warren County Community College class must conform to the required documentation style. Papers written for humanities (and some social science) classes will follow the most recent edition of the Modern Language Association (MLA) in-text citation and bibliographic methods. Social science and science papers will require the use of the most recent edition of the American Psychological Association (APA) in-text citation and bibliographic methods.

Please consult with your instructor regarding the correct documentation style to use in his/her class.

ATTENDANCE POLICY: Students are expected to attend all class sessions of courses in which they are enrolled and are responsible for all material presented in class and all homework assignments.

Grades are based on the quality of work completed in meeting the requirements for a particular course, as stated in the course syllabus and catalog description.

Excessive absence may be considered sufficient cause for dismissal from class by an instructor or other appropriate college staff member. Any decision to exclude a student from class or the
College due to excessive absence shall be subject to review by the President in accordance with established procedures. Students who have not attended class are not entitled to a refund of tuition.

WCCC HAYTAIAN & MAIER LIBRARY:  (908) 835-2336  http://warren.libguides.com

Library Hours

Monday-Thursday 8am-8pm

Friday 8am-3pm

Check the Academic Calendar for specific holiday dates. Exceptions may apply during breaks and summer sessions. Any changes to the Library’s hours are posted on the Library’s web page and near the Library doors.

- **Passwords and Log-Ins**-The Library is responsible for resetting passwords for your Network account (email, computers, Wi-Fi, library resources, and printing). This cannot be reset over the phone. Please stop by the Library for help.

- **College IDs**-College IDs are required for all students. The Library is responsible for producing all ID cards. To get an ID card you must bring to the Library a current copy of your class schedule and another form of ID. Your student ID is also your library card and is needed to check materials out of the Library. Your first ID card is free and replacement cards are issued at a cost to the student.

- **Inter-Library Loan (ILL)**-The Library participates in a nation-wide inter-library loan program which is available free to all students and faculty. You can either submit ILL requests via the Internet (form available on the Library’s web page) or in person at the circulation desk.

**TOPICAL OUTLINES:**

**TOPICAL LECTURE OUTLINE**

A. The Human Organism
   1. anatomy and physiology defined
   2. levels of structural organization
   3. anatomical position and names
   4. directional terms
   5. homeostasis

B. Chemical Basis of Life
   1. atoms, molecules, elements, compounds
   2. ionic, covalent, hydrogen bonding
   3. chemical reactions
   4. acids, bases, pH, buffers

C. Cell Biology and Genetics
1. plasma membrane, cytoplasm, organelles
2. protein synthesis, transcription, translation
3. cell division

D. Histology: The Study of Tissues
1. epithelial
2. connective
3. muscle
4. nervous
5. membranes
6. tissue repair

E. Integumentary System
1. skin structure, function
2. wound healing

F. Skeletal System: Bones and Bone Tissue
1. functions
2. histology compact, spongy bone
3. bone formation and growth
4. aging

G. Skeletal System: Gross Anatomy
1. axial skeleton
2. appendicular skeleton

H. Joints and Movements
1. functional and structural classification
2. fibrous joints
3. cartilaginous joints
4. synovial joints

I. Muscular System: Histology and Physiology
1. structure
2. function
3. types – skeletal, cardiac, smooth
4. contraction

J. Muscular System – Gross Anatomy
a. muscle movement
b. principal skeletal muscles

K. Functional Organization of Nervous Tissue
1. overview
2. neurons, neuroglia
3. organization: CNS, PNS
4. synapses
5. reflexes

L. Spinal, Cord & Spinal Nerves
1. Spinal Cord
2. Reflexes
3. Pathways
4. Peripheral Nerves
5. Spinal Cord

M. Brain and Cranial Nerves
   1. Parts of brain
   2. Meninges
   3. CSF
   4. Cranial Nerves

LABORATORY OUTLINE

Lab Safety; Organs, Systems and Organization of the Body – lab(s) #1
Homeostasis and Negative Feedback – Handout
Microscopy – lab#2
Cell Structure and Function – lab#3
Tissues – lab#4
Integumentary System – lab#5
Introduction to the Skeletal System- lab#6
Axial Skeleton (Skull, Vertebrae, Ribs, Sternum, Hyoid) – lab#9 and lab#8
Appendicular Skeleton – lab#7
Articulations – lab#10
Muscle Physiology – lab#11 (excluding experiments/dissection of animals and questions, related to them)
Muscles of Head and Neck – lab#14
Muscles of Torso - Vertebral Column, Abdomen and Pelvis – lab#15
Muscles of the Shoulder and Upper Extremity – lab#12
Muscles of the Hip, Thigh, Leg and Foot – lab#13
Introduction to Nervous System – lab#16 (no “BIOPAC” part)
Spinal Cord, Spinal Nerves & Reflexes – lab#18
Brain and Cranial Nerves – lab#17

GRADING METHODS:
ITINERARY: