



**Department:** Nursing – High School VN Track  
**Course Title:** Health Science  
**Section Name:** VNSG 1505  
**Semester:** Fall 2013  
**Time:** 0750-1050  
**Classroom:** CT 205

**Instructor:** Jessica Booth BSN, RN  
**Email:** jbooth@odessa.edu  
**Office:** CT 215  
**Phone:** 432-335-6459  
**Office Hours:** Thursday 10:30-3:30

### **Course Description:**

An introduction to the general principles of anatomy and physiology, nutrition, and microbiology that are necessary for understanding body processes and basic principles underlying health promotion and therapeutic interventions. The student will identify and describe major body structures and functions which comprise the major body systems; recognize and describe the relationship of nutrition to health and illness across the life span; identify microorganisms as causative agents in disease; and identify common causes for disease, modes of transmission, and methods of prevention and control.

### **End of Course Outcome**

The student will identify and describe major body structures and functions which comprise the major body systems; recognize and describe the relationship of nutrition to health and illness across the life span; identify microorganisms as causative agents in disease; and identify common causes for disease, modes of transmission, and methods of prevention and control.

### **Required Texts:**

You must purchase the following *required* reading/materials:

Structure and Function of the Body, 14<sup>th</sup> Edition; Thibodeau, G. and Patton, K. Elsevier. ISBN: 9780323077217  
Medical – Surgical Nursing 2<sup>nd</sup> Edition; DeWit, S. Elsevier. ISBN: 9781437717075  
William’s Basic Nutrition and Diet Therapy 13<sup>th</sup> Edition; Nix, S. Elsevier. ISBN: 9780323051996  
Introductory Clinical Pharmacology, 7<sup>th</sup> Edition; Edmuds, M. Evolve. ISBN: 9780323073981

The following study guides are optional:

Structure and Function of the Body Study Guide 14<sup>th</sup> Edition; Thibodeau, G. and Patton, K. Elsevier. ISBN: 9780323077231  
Medical – Surgical Nursing Study Guide 2<sup>nd</sup> Edition; DeWit, S. Elsevier. ISBN: 9781437722116

### **Description of Institutional Core Objectives (ICO’s)**

Given the rapid evolution of necessary knowledge and skills and the need to take into account global, national, state, and local cultures, the core curriculum must ensure that students will develop the essential knowledge and skills they need to be successful in college, in a career, in their communities, and in life. Therefore, with the

assistance of the Undergraduate Education Advisory Committee, the Coordinating Board has approved guidelines for a core curriculum for all undergraduate students in Texas.

Through the application and assessment of objectives within the institution’s core curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world; develop principles of personal and social responsibility for living in a diverse world; and advance intellectual and practical skills that are essential for all learning. Appropriate Odessa College faculty periodically evaluates all of the courses listed in the descriptions on the following pages of this catalog and keys them to Odessa College’s Institutional Core Objectives (ICOs), as defined by the Texas Higher Education Coordinating Board (THECB). (Source: *Odessa College Catalog of Courses 2012-2013, page 73*)

**Odessa College’s Institutional Core Objectives (ICOs):**

- 1) *Critical Thinking Skills* - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- 2) *Communication Skills* - to include effective development, interpretation and expression of ideas through written, oral and visual communication
- 3) *Empirical and Quantitative Skills* - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
- 4) *Teamwork* - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
- 5) *Personal Responsibility* - to include the ability to connect choices, actions and consequences to ethical decision-making
- 6) *Social Responsibility* - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities

**Learning Outcomes for VNSG 1505 Health Science (Source: *Odessa College Catalog of Courses*)**

<b>Outcome</b>	<b>ICO</b>
Apply nursing interventions to support activity and exercise along with client safety.	<i>Critical Thinking Skills</i> - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
Discuss the role of the nurse in different health and illness issues.	<i>Communication Skills</i> - to include effective development, interpretation and expression of ideas through written, oral and visual communication
Identify key terms in microbiology.	<i>Empirical and Quantitative Skills</i> - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

Identify the mechanism of action with the use of musculoskeletal system. Identify the anatomical structures and directions. Identify the body systems and the organs which make up the system.	<i>Teamwork</i> - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
List the fat soluble vitamins. List 5 water soluble vitamins. List two safety issues with the use of vitamins. List the primary anatomical structures.	<i>Personal Responsibility</i> - to include the ability to connect choices, actions and consequences to ethical decision-making
Identify the importance of micro-organisms in our daily lives. Identify the benefits of fat, carbohydrates and proteins. Identify the benefits of vitamins and minerals.	<i>Social Responsibility</i> - to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities

## Odessa College Policies

### **Academic Policies**

Note that the OC Student Handbook states (page 32) that “[i]n cases of academic dishonesty, the instructor has the authority to impose appropriate scholastic penalties. Complaints or appeals of disciplinary sanctions may be filed in accordance with the college due process procedure. Copies of the college due process procedure are available in the office of The Director of Student Life (CC104).”

For more information on your rights and responsibilities as a student at Odessa College, please refer to the following: *The 411 of OC: Student Handbook 2012-2013; Student Rights & Responsibilities* <http://www.odessa.edu/dept/studenthandbook/handbook.pdf>

### **Scholastic Dishonesty**

Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by board policies. Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism and collusion.

#### **"Cheating on a test" shall include:**

- Copying from another student's test paper
- Using test materials not authorized by the person administering the test.
- Collaborating with or seeking aid from another student during a test without permission from the test administrator.
- Knowingly using, buying, selling, stealing or soliciting, in whole or in part, the contents of an unadministered test.
- The unauthorized transporting or removal, in whole or in part, of the contents of the unadministered test.
- Substituting for another student, or permitting another student to substitute for one's self, to take a test.
- Bribing another person to obtain an unadministered test or information about an unadministered test.
- "Plagiarism" shall be defined as the appropriating, buying, receiving as a gift, or obtaining by any means another's work and the unacknowledged

submission or incorporation of it in one's own written work.

- "Collusion" shall be defined as the unauthorized collaboration with another person in preparing written work for fulfillment of course requirements. (Source: *Odessa College Student Handbook 2012-2013, page 29-30*)

### **Special Populations/Disability Services/Learning Assistance**

Odessa College complies with Section 504 of the Vocational Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. If you have any special needs or issues pertaining to your access to and participation in this or any other class at Odessa College, please feel free to contact me to discuss your concerns. You may also call the Office of Disability services at 432-335-6861 to request assistance and accommodations.

Odessa College affirms that it will provide access to programs, services and activities to qualified individuals with known disabilities as required by **Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990 (ADA)**, unless doing so poses an undue hardship or fundamentally alters the nature of the program or activity. Disabilities may include hearing, mobility or visual impairments as well as hidden disabilities such as chronic medical conditions (arthritis, cancer, diabetes, heart disease, kidney disorders, lupus, seizure disorders, etc.), learning disabilities or psychiatric or emotional disabilities. A student who comes to Odessa College with diagnosed disabilities which may interfere with learning may receive accommodations when the student requests them and submits proper documentation of the diagnosis. A Request for Accommodations form and guidelines for beginning the request process are available in the OC Help Center or on the Odessa College web site at [www.odessa.edu/dept/counseling/disabilities.htm](http://www.odessa.edu/dept/counseling/disabilities.htm). The college strives to provide a complete and appropriate range of services for students with disabilities such as assistance with testing, registration, information on adaptive and assistive equipment, tutoring, assistance with access and accommodations for the classroom where appropriate. For information regarding services, students with disabilities should contact the Office of Disability Services in the OC Help Center located in Room 204 of the Student Union Building or call 432-335-6433. (Source: *Odessa College Catalog of Courses 2012-2013, page 52*)

### **Dropping a Course or Withdrawing from College**

Students wishing to drop a non-developmental course may do so online using WebAdvisor, at the Wrangler Express, or Registrar's Office. A student wishing to drop a developmental course or withdraw from college should obtain a drop or withdrawal form from the Wrangler Express or the Registrar's Office. Students are encouraged to consult with instructors prior to dropping a class. Students may not completely withdraw from the college by use of the Web. Students must drop a class or withdraw from college before the official withdrawal date stated in the class schedule. Students who are part of the Armed Forces Reserves may withdraw with a full refund if the withdrawal is due to their being ordered into active duty. A copy of the student's orders must be presented to the Registrar's Office at the time of the withdrawal. For details, please contact the Office of the Registrar. **No longer attending class does not automatically constitute withdrawal from that class, nor does a student's notification to an instructor that the student wishes to be dropped. Failure of a student to complete the drop/withdrawal process will result in a grade of "F."** (Source: *Odessa College Catalog of Courses 2012-2013, page 36*)

### **Learning Resource Center (LRC; Library)**

The Library, known as the Learning Resources Center, provides research assistance via the LRC's catalog (print books, videos, e-books) and databases (journal and magazine articles). Research guides covering specific subject areas, tutorials, and the "Ask a Librarian" service provide additional help.

### **Student Success Center (SCC)**

Located in the LRC, the Student Success Center (SSC) provides assistance to students in meeting their academic and career goals. We strive to provide new and updated resources and services at no charge to OC students. Academic support services include tutoring, study skills training, workshops, and the mentoring program. Tutoring is available for a variety of subjects including college mathematics, English, government, history, speech, chemistry, biology, and all developmental coursework. Appointments are preferred, but walk-ins will be served as soon as possible. Smarthinking online tutoring is also available. All computers in the center have Internet access, Microsoft Office, and software resources to assist OC students in improving their reading, writing and mathematical skills. The center also offers special assistance to students preparing for the THEA/COMPASS test. Computer lab assistants are available to assist students with student email, Blackboard, OC portal, Course Compass and more. For more information or to make an appointment, please call 432-335-6673 or visit [www.odessa.edu/dept/ssc/](http://www.odessa.edu/dept/ssc/) (Source: *Odessa College Catalog of Courses 2012-2013, page 54*)

### **Student E-mail**

Please access your Odessa College Student E-mail, by following the link to either set up or update your account: <http://www.odessa.edu/gmail/>. **Correspondence will be submitted using your Odessa College email as an alternative method to contact you with information regarding this course.**

### **Technical Support**

For Blackboard username and password help and for help accessing your online course availability and student email account contact the Student Success Center at 432-335-6878 or online at [https://www.odessa.edu/dept/ssc/helpdesk\\_form.htm](https://www.odessa.edu/dept/ssc/helpdesk_form.htm).

### **Expectations for Engagement – Face to Face Learning**

To help make the learning experience fulfilling and rewarding, the following Expectations for Engagement provide the parameters for reasonable engagement between students and instructors for the learning environment. Students and instructors are welcome to exceed these requirements.

#### *Reasonable Expectations of Engagement for Instructors*

1. As an instructor, I understand the importance of clear, timely communication with my students. In order to maintain sufficient communication, I will
  - provided my contact information at the beginning of the syllabus;
  - respond to all messages in a timely manner through telephone, email, or next classroom contact; and,
  - notify students of any extended times that I will be unavailable and provide them with alternative contact information (for me or for my supervisor) in case of emergencies during the time I'm unavailable.
2. As an instructor, I understand that my students will work to the best of their abilities to fulfill the course requirements. In order to help them in this area, I will
  - provide clear information about grading policies and assignment requirements in the course syllabus, and

- communicate any changes to assignments and/or to the course calendar to students as quickly as possible.
3. As an instructor, I understand that I need to provide regular, timely feedback to students about their performance in the course. To keep students informed about their progress, I will
    - return classroom activities and homework within one week of the due date and
    - provide grades for major assignments within 2 weeks of the due date or at least 3 days before the next major assignment is due, whichever comes first.

*Reasonable Expectations of Engagement for Students*

1. As a student, I understand that I am responsible for keeping up with the course. To help with this, I will
  - attend the course regularly and line up alternative transportation in case my primary means of transportation is unavailable;
  - recognize that the college provides free wi-fi, computer labs, and library resources during regular campus hours to help me with completing my assignments; and,
  - understand that my instructor does not have to accept my technical issues as a legitimate reason for late or missing work if my personal computer equipment or internet service is unreliable.
2. As a student, I understand that it is my responsibility to communicate quickly with the instructor any issue or emergency that will impact my involvement with or performance in the class. This includes, but is not limited to,
  - missing class when a major test is planned or a major assignment is due;
  - having trouble submitting assignments;
  - dealing with a traumatic personal event; and,
  - having my work or childcare schedule changed so that my classroom attendance is affected.
3. As a student, I understand that it is my responsibility to understand course material and requirements and to keep up with the course calendar. While my instructor is available for help and clarification, I will
  - seek out help from my instructor and/or from tutors;
  - ask questions if I don't understand; and,
  - attend class regularly to keep up with assignments and announcements.

**Tobacco Free Policy**

In accordance with Tobacco-Free Policies of area health care facilities, students are not allowed to use tobacco products of any kind during clinical experiences. This includes cigarettes, cigars, and oral tobacco products. Students are not allowed to leave the grounds of the health care facility to use tobacco products (or for any other reason). If a student leaves the grounds of the clinical site or violates the Tobacco-Free Policy of the Odessa College Nursing Program or of a clinical facility, a written "Tobacco Use Warning Form" will be issued to the student by the instructor for the first event. This form will be signed by the instructor and the student, and will be placed in the student's personal file in the Nursing Office. In the event an instructor has the need to issue a "Tobacco Use Warning Form" to a student, the instructor will check the student's file for previous tobacco use warnings. A second violation of this policy will result in a second warning which will also be recorded on the form and signed by the instructor and the student. A third violation of this policy will result in a "Clinical Failure" in the clinical course in which the student is currently enrolled. See Odessa College Nursing Student Handbook regarding Clinical Failures.

## Institutional Calendar

OC CALENDAR: FALL 2013	
<b>Fall 2013</b> (8/26/13-12/14/13)	
NOTE: College business offices are closed from Wed., Nov 27 through Sun., Dec 1.	
<b>FALL &amp; SPRING BUSINESS HOURS:</b>	
Wrangler Express Center: M-Th: 7:30 am-7 pm; Fri: 7:30 am-5 pm; Sat: 9 am-noon Other offices: M-Th: 8 am-5:30 pm; Fri: 8 am-1 pm	
<b>SUMMER BUSINESS HOURS</b>	
Wrangler Express Center: (beginning May 20) M-Th: 7:30 am-7 pm; Fri: 8 am-5 pm; Closed Saturdays (beginning Aug 3, Wrangler Express will also be open 9 am-noon on Saturdays) Other offices: May 20-Aug 17 (M-Th: 7:30 am-5:30 pm; closed Fridays)	
<b>Registration:</b>	
On the Web (5 am to Midnight, 7 days a week)	Apr 15-Aug 25
In Person (See Business Hours Above)	Apr 15-Aug 23
FOR TUITION AND FEE SCHEDULES & PAYMENT INFORMATION, PLEASE CHECK ONLINE AT <a href="http://www.odessa.edu">www.odessa.edu</a>	
Classes Begin	Aug 26 (Mon)
<b>Late Registration &amp; Schedule Changes (Add/Drop):</b>	
On the Web (5 am to Midnight, 7 days a week)	Aug 26-27 (Mon-Tues)
In Person (See Business Hours Above)	Aug 26-27 (Mon-Tues)
Holiday (Labor Day - Offices closed except for Wrangler Express - No Classes)	Sep 2 (Mon)
Census Day	Sep 11 (Wed)
Last Day to Drop or Withdraw with a "W" (1st eight week courses)	Oct 4 (Fri)
First Eight Weeks End	Oct 18 (Fri)
Second Eight Weeks Begin	Oct 21 (Mon)
Deadline for Fall Degree Application	Nov 1 (Fri)
Last Day to Drop or Withdraw with a "W" (full semester length courses)	Nov 12 (Tues)
Last Day to Drop or Withdraw with a "W" (2nd eight week courses)	Nov 26 (Tues)
Student Evaluation of Instruction Survey Available Online	Nov 18-22 (Mon-Fri)
Thanksgiving Holiday (begins 9 pm Tues, Nov 26)	Nov 27-30 (Thurs-Sat)
Last Class Day	Dec 7 (Sat)
Final Exams	Dec 9-12 (Mon-Thurs)
End of Semester	Dec 12 (Thurs)
Fall Graduation	Dec 14 (Sat)
College Offices Closed	Dec 21-Jan 6 (Sat-Sun)

## Course Policies

### Teaching/Learning Methods:

The following teaching/learning methods may be incorporated into VNSG 1505: Lecture, discussion, case studies, technological instructional modalities, reading assignments, peer interaction, role playing, group projects/assignments, writing assignments, oral presentations and study guides.

Students are expected to:

1. Adhere to the requirements in the OC HSVN Student Handbook.
2. Take all unit exams and final exam.
3. All assignments must be turned in or the student will receive an incomplete (grade of "I") for the course.
4. Content to be tested on the unit exam will follow course objectives and may include: math problems, assigned reading, information from audio/visual learning aids, classroom content, study guides and other assigned activities and since this is a comprehensive class, each exam may contain questions related to prior content.
5. Each unit of study will require the student to complete assignments as instructed.
6. Cell phones and beeper are distracting to students and the instructors when they ring during class. Cell phones and beepers must be turned off or place in silent mode while in class and placed in designated cell phone area for testing.

### Math Competency

Students are required to pass a math dosage and calculation competency exam each semester. Students will be given 3 chances to pass the exam each semester. During their first year of the program the test must be passed with an 85% or higher. During the second year of the program the test must be passed with a 90% or higher. Failure to pass the exam will result in failure of Health Science and subsequently failure of the program.

## **Professional Behavior**

Professional behavior is absolutely essential both while in the classroom and clinical setting as well as after graduation. Professional behavior expectations are clearly stated in the student handbook. If a faculty member observes consistent failure to demonstrate acceptable professional behavior by a student, the faculty will implement the process for counseling the student. Failure to respond appropriately to counseling regarding professional behavior will result in dismissal from the program.

## **Disclaimer**

This syllabus is tentative and subject to change in any part at the discretion of the instructor. Any changes will be in accordance with Odessa College policies. Students will be notified of changes, if any, in timely manner.

## **Original Effort**

The work submitted for this course must be original work prepared by the student enrolled in this course. Efforts will be recognized and graded in terms of individual participation and in terms of ability to collaborate with other students in this course.

## **Description of students**

Students enrolled in this course: High School Junior level students enrolled in the High School Vocational Nursing Program.

## **Course prerequisites**

Program Admission.(Source: *Odessa College Catalog of Courses 2012-2013, page 178*)

## **Course corequisites**

VNSG 1327

## **Course Alignment with Industry Standards**

The Odessa College High School Vocational Nursing Program is a 2-year 2 summer certificate program to prepare the graduate to become a licensed vocational nurse (LVN). The LVN functions as an important member of a health care team under a licensed physician and/or a registered nurse's supervision. Vocational nurses provide care in a variety of structured health care settings for individual clients who are experiencing common health problems. Upon successful program completion, the graduate is eligible to take the NCLEX examination to obtain licensure.

The Odessa College High School Vocational Nursing Program is approved by the Texas Board of Nursing. The nursing curriculum plan is approved by the Texas Higher Education Coordinating Board (THECB).

## **Digital Protocol**

Cell phones must be placed on either *vibrate* or *silent* mode and are to be accessed in emergency cases only. The use of laptops or any other digital device is permitted in order to facilitate note-taking relative to instruction. Any written assignments will be submitted electronically on Blackboard. **The electronic recording of the time on Blackboard will be considered the time of assignment submission. Take necessary steps to ensure that your assignments are submitted on "Blackboard" time.** Back-up and/or additional copies of all assignments submitted is encouraged. **Computers/printers are available to OC students in the LRC (301-303); therefore, not having access to a computer due to technical issues (crash; corrupted files) will not be considered as an acceptable reason for not completing assignments.** If there is a loss of server connection with Odessa College due to maintenance, then an email will be sent to student with

pertinent information and status reports. Assignments submitted electronically need to be **WORD documents (doc or docx)**.

### **Attendance Policy**

Students are expected to attend class regularly. Attendance will be recorded using a “sign-in” sheet. Regular attendance at lecture and lab is essential and required for compliance with the Board of Nursing Program requirements. Excessive absences will be grounds for disciplinary action, and will be determined on a case-by-case basis. If you are more than 15 minutes late to class or leave class early without notifying the instructor, this will count as an absence. The student will be responsible for any material covered during their absence. They are responsible for contacting the instructor to determine make up assignments. Please contact the instructor as soon as you are aware you will be absent.

Projects or outside assignments are due at the beginning of class on the assigned due date. Missing or late assignments will not be accepted unless prior arrangements are made with the instructor before the due date.

Exams are defined as formally scheduled examinations covering a major portion of the course content and make up 70 percent of the overall grade for the course. Every effort should be made by the student to be present for all exams. If it is necessary for a student to miss an exam, the instructor must be notified and the exam must be taken on the next class day the student is present. Ten points will be taken off of the grade as a penalty for taking the examination late. The instructor has the option to give the same exam or to make up another examination over the same content. If the exam is not made up within the first class day and additional 10 points will be taken off each day the exam is not taken.

Daily work will include quizzes. If the student misses a quiz due to being absent, the student will not have the option to make-up the quiz. Zeros will be recorded and averaged in the final grade.

### **AVID**

This course has been identified as a course by Career, Technical, and Workforce Education as one in which teaching and learning strategies adopted by AVID will be implemented. As a student in the legal program, you will be expected to develop an understanding of the strategies, to model the strategies, to maintain fidelity of implementation, and to examine how these strategies may impact your effectiveness as a professional in your chosen area of occupation, either through coursework or practicum experience as outlined by the course instructor.

### **Grading Policy**

Please understand that this is a required course for the High School Vocational Nursing Program in order to prepare you to pass the NCLEX exam upon graduation. Quality work and active participation is expected and not to be negotiated. As a general policy, grades will be taken in class. Any written assignments or tests will be graded outside of class. You can expect feedback on assignments within a week’s time.

### **Grade Inquiry Policy**

It is the responsibility of the individual taking this course to maintain accurate track of assignment submissions and grades. There will be opportunities during the semester to meet with the instructor to discuss your academic progress. Contact the instructor to schedule an appointment. Class time will not be used for grade inquiries. All grades are final.

## Communication Plan

The best way to communicate with the course instructor is via email through Blackboard. Also, check in Blackboard regularly for announcements, including any changes in the course schedule due to instructor illness or conference attendance. Appointments with the instructor may also be scheduled.

## General Course Requirements

1. Attend class and participate.
2. Contribute and cooperate with civility.
3. **Submit assignments on time. Late work will not be accepted. Medical and/or family circumstances that warrant an extension on assignments need to be presented to the instructor. Extensions will be allowed at the instructor's discretion.**

## Grading Scale:

- “A” = 90-100
- “B” = 80-89
- “C” = 75-79
- “D” = 60-74
- “F” = 0-59

A minimum grade of C is required in all nursing and allied health courses. Each component within a course must be completed with a C or above or the student will receive a failing grade. A student who fails to attain 75% on a unit examination must provide documentation of remediation by an approve tutor or student mentor. Arrangements must be made in conjunction with an instructor in the program.

A minimum grade of 90% is required on the math competency examination which is administered in each class. The student will have 3 opportunities to pass this examination. A student who does not successfully pass the examination on the first and second attempts will be required to show evidence of remediation with an instructor. A student who is unable to pass the competency examination on the third opportunity will be dismissed from the program.

## Incomplete Policy

An ‘Incomplete’ grade may be given only if:

1. The student has passed all completed work
2. If he/she has completed a minimum of 75% of the required coursework. A grade of an “I” will only be assigned when the conditions for completions have been discussed and agreed upon by the instructor and the student.

## Overview of assignments

Type of Assignment	Percentage
1. Daily Work/Discussion	5%
2. Chapter Quizzes	10%
3. Projects	10%
4. Module Exams	50%

**Unit Breakdown**

## Anatomy and Physiology

<b>Module</b>	<b>Topics</b>	<b>Reading Assignments</b>
1	Introduction to the function of the body. Chemistry of life. Cells and tissues. Organ systems, integumentary system, skeletal system, and muscular system.	Thibodeau Chapters 1-7
2	Nervous system. The senses, endocrine system, blood, cardiovascular system, lymphatic system, and respiratory system.	Thibodeau Chapters 8-14
3	Digestive system, nutrition and metabolism, Urinary system, fluid and electrolyte. Acid-base balance. Reproductive system. Growth and development.	Thibodeau Chapters 15-21

## Microbiology

<b>Module</b>	<b>Topic</b>	<b>Reading Assignments</b>
1	Microbiology the science. Cell structure, controlling microbial growth. Antimicrobial agents. Undesirable effects of antimicrobial agents.	Handout/Power Point
2	Epidemiology. Healthcare epidemiology.	Handout/Power Point Med-Surg Chapter 6 Fundamentals Chapters 10 & 22
3	Pathogenesis of infectious diseases. Overview of infectious diseases.	Handout/ Power Point

## Nutrition

<b>Module</b>	<b>Topics</b>	<b>Reading Assignments</b>
1	Food, nutrition and health. Carbohydrates. Fats. Proteins.	Nix Chapters 1-4
2	Vitamins, minerals. Nutrition during pregnancy. Nutrition during infancy, childhood and adolescence. Nutrition for adults.	Nix Chapters 7,8 and 10-12

**Course Calendar**

Attached is the tentative schedule for the fall semester of 2013. Please note that testing dates and project due dates are subject to change due to material covered.

# August 2013

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26 Dosage Syllabus Begin Unit 1	27 Health Science Syllabus Begin A&P Unit 1	28 Dosage Unit 1	29 A&P Unit 1	30 TBD: ATI Remediation as needed	31

# September 2013

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2 <b>Labor Day</b> <b>No Classes</b>	3 A&P Unit 1	4 Dosage Unit 1	5 A&P Unit 1 Review	6 TBD: ATI Remediation as needed	7
8	9 Dosage Unit 1	10 <b>A&amp;P Unit 1 Exam</b> Begin A&P Unit 2	11 Dosage Unit 1 Review	12 A&P Unit 2	13 TBD: ATI Remediation as needed	14
15	16 <b>Dosage Unit 1 Exam</b> Begin Dosage Unit	17 A&P Unit 2	18 Dosage Unit 2	19 A&P Unit 2 Review	20 TBD: ATI Remediation as needed	21
22	23 Dosage Unit 2	24 <b>A&amp;P Unit 2 Exam</b> Begin A&P Unit 3	25 Dosage Unit 2 Review	26 A&P Unit 3	27 TBD: ATI Remediation as needed	28
29	30 <b>Dosage Unit 2 Exam</b> Begin Dosage Unit					

# October 2013

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		1 A&P Unit 3	2 Dosage Unit 3	3 A&P Unit 3 Review	4 TBD: ATI Remediation as needed	5
6	7 Dosage Unit 3	8 A&P 3 Exam	9 Dosage Unit 3 Review	10 A&P Final Review	11 TBD: ATI Remediation as needed	12
13	14 Dosage Unit 3 Exam Begin Dosage Unit	15 A&P Final Exam Begin Micro Unit 1	16 Dosage Unit 4	17 Micro Unit 1	18 TBD: ATI Remediation as needed	19
20	21 Dosage Unit 4	22 Micro Unit 1 Exam Begin Micro Unit 2	23 Dosage Unit 4	24 Micro Unit 2	25 TBD: ATI Remediation as needed	26
27	28 Dosage Unit 4	29 Micro Unit 2 Exam Begin Micro Unit 3	30 Dosage Unit 4 review	31 Micro Unit 3		

# November 2013

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1 Micro Project Due	2
3	4 TBD: ATI Remediation as needed	5 Micro Unit 3 Exam Begin Growth and Development Unit	6 Dosage Unit 4 Exam	7 Growth and Development Unit 1	8 Med Math Review	9
10	11 Math Test	12 Growth and Development Exam 1	13 Math Remediation	14 Growth and Development Unit 2	15 TBD: ATI Remediation as needed	16
17	18 Math Test (If needed)	19 Growth and Development Exam 2	20 Math Remediation	21 Nutrition Unit 1	22 TBD: ATI Remediation as needed	23
24	25 Math Test (If needed)	26 Nutrition Exam 1 Begin Nutrition Unit 2	27 Thanksgiving No classes	28 Thanksgiving No classes	29 Thanksgiving No classes	30

# December 2013

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2 Dosage Final Review	3 Nutrition Unit 2	4 Dosage Final Review	5 Nutrition Unit 2 Exam	6 Nutrition Project Due	7
8	9 Dosage Final	10 Health Science Final Review	11	12 Health Science Final	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

## **Course Objectives (by modules):**

### **A&P Module 1**

1. Define the term anatomical position.
2. List and define the principal directional terms and sections used in describing the body and the relationship of body parts to one another.
3. Explain the concept of pH.
4. Discuss the structure and function of the following types of organic molecules: carbohydrate, lipid, protein, and nucleic acid.
5. Compare the major passive and active transport processes that act to move substances through cell membranes.
6. List the major types of connective and muscle tissue.
7. List the 11 major organ systems of the body.
8. Describe the major functions of each major organ system.
9. List and discuss the three primary functions of the integumentary system.
10. Classify burns and describe how to estimate the extent of a burn injury.
11. List the generalized functions of the skeletal system.
12. List the three major types of muscle tissue.
13. Name and identify on a model the major muscle groups.

### **A&P Module 2**

1. Identify the major anatomical components of the brain and spinal cord.
2. Compare and contrast spinal and cranial nerves.
3. Discuss the anatomical and functional characteristics of the two divisions of the autonomic nervous system.
4. Discuss the general sense organs and their functions.
5. Explain how negative and positive feedback mechanisms regulate the secretion of endocrine hormones.
6. Define diabetes insipidus, diabetes mellitus, gigantism, goiter, cretinism, and glycosuria.
7. Describe the primary functions of blood.
8. Explain the steps involved in blood clotting.
9. Describe ABO and RH blood typing.
10. Discuss the location, size, and position of the heart, identify the heart chambers, valves and sounds.
11. Trace blood through the heart and compare the functions of the heart chambers on the right and left sides.
12. List the anatomical components of the heart conduction system and discuss the features of normal electrocardiogram.
13. Describe the generalized functions of the lymphatic system.
14. Discuss the development and functions of B and T Cells
15. Compare and contrast humoral and cell-mediated immunity.
16. List the major organs of the respiratory system.
17. Discuss the generalized functions of the respiratory system.
18. Identify the mechanisms that regulate respiration.

### **A&P Module 3**

1. Define and contrast mechanical and chemical digestion.
2. Define peristalsis, bolus, chime, jaundice, ulcer and diarrhea.
3. Define basal metabolic rate and list some factors that affect it.
4. Discuss the physiological mechanisms that regulate body temperature.
5. Identify the major organs of the urinary system.
6. Discuss the mechanisms that control urine volume.

7. Explain how the kidney acts as a vital organ in maintaining homeostasis.
8. Discuss the nature and importance of electrolytes in body fluids and explain the aldosterone mechanism of extracellular fluid volume control.
9. Give examples of common fluid imbalances.
10. Define the terms buffer and buffer pair and contrast strong and weak acid and bases.
11. Contrast the respiratory and urinary mechanisms of pH control.
12. Identify and describe the structures that constitute the external genitals in both sexes.
13. Discuss the effects of aging on the major body organ systems.

### **Micro Module 1**

1. Discuss Micro as a science.
2. Identify structures of the cell.
3. Identify ways of controlling microbial growth.
4. Give examples of antimicrobial agents.
5. Discuss undesirable effects of antimicrobial agents.

### **Micro Module 2**

1. Define epidemiology.
2. Analyze factors that increase the risk of infection.
3. Analyze situations that require the use of expanded precautions.
4. List the types of personal protective equipment and analyze situations or when they should be used.

### **Micro Module 3**

1. Discuss pathogenesis of infectious diseases.
2. Identify common infectious diseases, treatments and precautions.

### **Nutrition Module 1**

1. Discuss food and nutrient guides.
2. Identify proper nutrition as a major component of health promotion.
3. Identify sources of carbohydrates and their function in the diet.
4. Identify sources of fats and their functions in the diet.
5. Identify sources of proteins and their functions in the diet.

### **Nutrition Module 2**

1. Identify sources of vitamins and their functions in the diet.
2. Identify sources of minerals and their functions in the diet.
3. Identify differing nutritional needs during pregnancy and lactation.
4. Identify differing nutritional needs during infancy, childhood and adolescence.
5. Identify differing nutritional needs for the aging adult.