I. INTRODUCTION
A. **Course Description:** An introduction to the general principles of anatomy and physiology, nutrition and microbiology necessary for understanding the body processes and basic principles underlying health promotion and therapeutic interventions. These concepts of communication, caring, community, and clinical reasoning will be included throughout this course.

B. This is a required course in the Vocational Nursing curriculum.

C. This course is occupationally related and serves as preparation for careers in Nursing (Vocational Nursing).

D. **Pre-requisites:** Admission into the Vocational Nurse Program and completion of Health Care Provider BLS course (American Heart Association).

E. **Co-requisites:**
   1. VNSG 1304, Foundations of Nursing
   2. VNSG 1323, Basic Nursing skills
   3. VNSG 1126, Gerontology
   4. VNSG 1122, Vocational Nursing Concepts
   5. VNSG 1227, Essentials of Medication Administration

F. **Policy:** Dependent on Spring or Fall admission, the student will refer to the specific curriculum chart and follow that progression pattern.

G. Secretary’s Commission on Achieving Necessary Skills (SCANS) and Differentiated Essential Competencies (DEC’s).

Alphanumeric coding used throughout the syllabus denotes the integration of SCANS occupational competencies (C) and foundation skills (F). The DECs competencies that are implemented in VNSG 1405 are also alphanumeric coded as Provider of Patient-Centered Care (PPCC, A-D) Patient Safety Advocate (PSA, A-H) Member of the Health Care Team and Member of a Profession (MHCT, A-G).
II. Learning Outcomes

Upon successful completion of this course, Health Science, the student will:

A. Identify changes which may be experienced by the health individual and; and the body’s response to the changes. (C 5, 7; F 9, 12) (MOP, D) (PPCC B)

B. Identify and describe major body structures and functions which compromise the major body systems. (C 5, 7; F 9, 12) (MOP D) (PPCC B)

C. Utilize evidence-based practice, clinical reasoning, and a systematic problem-solving process as a framework for providing care based on how the body operated in a healthy state to the effects of disease processes on healthy tissue. Identify microorganisms as causative agents in disease and common causes for disease, modes of transmission, and methods of prevention and control. (C5,7,14,15; F7,8,9,10,11,12) (MOP D) (PPCC B)

D. Recognize and describe the relationship of nutrition to health and illness across the lifespan. Relate and demonstrate awareness of legal and ethical issues in the provision of care for the patient. (C 15; F 5, 12, 17) (MOP D)

E. Apply therapeutic communication and education to maintain effective interpersonal relationships with the patient. (C 7, 14; F 5, 6, 15) (MOP D)

F. Demonstrate an understanding of the following Differentiated Essential Competencies (DEC’s)(MOP D) (PPCC B)
   1. Provider of Patient-Centered Care:
      - Knowledge A (3-4)
      - Knowledge B (2, 4-6, 11)
      - Knowledge C (6, 8)
   2. Member of a Profession:
      - Knowledge A (1-4)
      - Knowledge B (1-3, 4)
      - Knowledge D (2)

G. Demonstrate behaviors that are congruent with the ANA Code of Ethics, Scope and Standards of Practice, and Social Policy Statements in all class related interactions. (C9, 11, 14, 15; F15, 16, 17) (MOP A3; PPCC B2, B5; MHCT D4).

III. INSTRUCTIONAL MATERIALS

A. Instructional Materials
   1. The instructional materials for this course are viewable through www.ctcd.edu/books
   2. Course materials can be found at https://ctc.blackboard.com/webapps/login/
   3. Non-scientific calculator
   4. Mechanical Pencil
   5. Scantrons (4) provided to instructor at beginning of semester
B. **Teaching Methods**: Lecture with PowerPoints, videos, group learning activities, and group discussion. BlackBoard will be used for posting additional learning resources and students are expected to utilize the links provided to review the information in preparation for class discussion. Any materials posted on BlackBoard and relevant to the topic(s) discussed in class is potentially “testable” material.

C. **Computer Accessibility**: Accessibility to computer hardware and software that will support the completion of assignments on the internet, DVD, CD, or other electronic delivery is required. All Vocational Degree Nursing courses (VNSG and HPRS), whether traditional, blended, or online utilize Blackboard Learning Management System tools for communication and course requirements. Other online components, such as publisher online resources, online activities, or data base searches may also be required. It is expected that students enrolled in VNSG or HPRS courses have access to a computer with minimum technical requirements, have a consistent and reliable Internet connection, possess basic computer skills, and have the ability to download and install applications or plug-ins. Online components/requirements may be completed in a CTC computer lab or on a home computer. Students are recommended to familiarize themselves with the locations and available hours of CTC computer labs in the event that home computers or Internet access are unavailable or unreliable. No extensions or alternate due dates for assignments or exams will be granted due to computer or Internet difficulties.

D. **Supplementary Materials**: Various electronic media systems, computer software, websites, experiential group exercises, and simulated situations as suggested by the faculty to enhance clinical practice in nursing are used.

E. **References**: Current professional nursing journal article readings are used to supplement dated textbook information.

F. **Library Resources**: It is expected that all students will have a working knowledge of the Oveta Culp Hobby Memorial Library, and off-site access to library resources.

G. Current practice guidelines set forth by Occupational Safety & Health Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH) related to safe patient handling and ergonomics will be implemented.

H. Six areas of core competencies, as delineated by the Quality and Safety Education for Nurses (QSEN) project will be taught and evaluated in relation to the course objectives and content for VNSG 1323. The (QSEN) project is to meet the challenge of preparing future nurses who will have the knowledge, skills and attitudes (KSAs) necessary to continuously improve the quality and safety of the healthcare systems within which they work. The six core competencies are: Patient-Centered Care, Teamwork and Collaboration, Evidence-Based Practice, Quality Improvement, Safety, and Informatics.
IV. COURSE REQUIREMENTS

A. Preparation for Class: An orientation to class will be provided on the first day of the course. In preparation for all classes, students are required to obtain the Course Guidelines and Syllabus from the Central Texas College Blackboard website, read the objectives, text, and any HESI materials related to that unit of study. The signature sheet at the end of the syllabus must be printed off, signed and dated by the student to acknowledge their understanding, and turned into the course instructor on the first day of class.

The appropriate study guide chapters and critical thinking exercises should be completed to supplement understanding of the topics and concepts discussed. Students are expected to participate verbally in a variety of classroom activities/discussions.

B. Written Assignments:
   1. Students are expected to participate verbally in a variety of classroom activities/discussions.
   2. HESI Testing and Remediation: It is mandatory for VN student’s at all three levels of the program to participate in the HESI comprehensive assessment and review program. Detailed diagnostic reports at the end of the semester provide student immediate results and opportunity for remediation. Failure to achieve satisfactory results on the proctored HESI exams requires the student to remediate. Failure to remediate could result in the student not being permitted to register for subsequent classes. Failure to take an exam results in course failure. With prior notification to instructor, accommodation for an alternate examination date will be considered on an individual basis.

C. Class Performance
   1. Attendance Policy- This course adheres to the college attendance policy published in the Department of Nursing & Allied Health Student Handbook. All students are expected to be in class on time.
   2. Classroom absences may negatively impact the student’s performance, on examinations. If absences occur from the classroom, it is the student’s responsibility to obtain missed work from his/her peers.
   3. No seats in the classroom are reserved.
   4. All students are required to complete the semester General Nursing Orientation on Black board by the designated day and time each semester as posted.
   5. Following an illness or other medical or mental health related event, during the duration of the program, the student may be required to obtain a “Student Nurse Medical Release Return to Class/Clinical” from their health care provider prior to returning to the clinical/classroom agency. The required release must include 1) when the student can return to school/clinical and (2) specific limitations on activity level, if any. The form must be faxed/mailed from the health care provider’s office/submitted in a sealed envelope. Please see the Department of Nursing & Allied Health office for the official form.
6. Faculty reserves the right to adjust the student’s classroom grade based upon classroom performance/behavior/civility.

7. You **may not** audiotape a lecture without the faculty’s/speaker’s permission.

D. **Class Participation:** Students are expected to read prior to class and be prepared to participate. Any and all homework assignments must be completed prior to attending class. Students will actively engage in discussions during classroom periods, answer questions when called upon, and/or be able to research answers related to classroom discussion if asked.

E. **Progression:** This course has pre-requisites and co-requisites that apply. Students must obtain a 70% average grade to successfully complete this course.

F. **Academic Integrity/Scholastic Honesty:** The following statement is published in the Central Texas College Catalog:

All students are required and expected to maintain the highest standards of scholastic honesty in the preparation of all course work and during examinations. The following will be considered examples of scholastic dishonesty:

1. **Plagiarism** – the taking of passages from the writing of others without giving proper credit to the sources.

2. **Collusion** - (a) using another’s work as one’s own, or (b) working together with another person in the preparation of work, unless such joint preparation is specifically approved in advance by the instructor.

3. **Cheating** - giving or receiving information on examinations.

Students guilty of scholastic dishonesty will be administratively dropped from the course with a grade of “F” and subject to disciplinary action.

All Vocational Nursing students are expected to abide by this policy. Falsification of attendance records is considered a violation of academic integrity. Obtaining or utilizing “Test Bank Materials” from any current or obsolete textbook, is considered scholastic dishonesty.

G. **Values and Ethics in Nursing**

Students are expected to demonstrate commitment to the following values and ethical principles believed to be inherent to the nursing profession:

1. **Altruism**- Concern for the welfare of others seen through caring, commitment, and compassion.

2. **Human Dignity**- Belief in the inherent worth and uniqueness of the individual seen through respect, empathy, humanness, and trust.

3. **Truth**- Faithfulness to fact seen through honesty, accountability, and authenticity.

4. **Justice**- Upholding moral and legal principles seen through courage, advocacy, and objectivity.

5. **Freedom**- Capacity to exercise choice seen through openness, self-direction, and self-discipline.

6. **Equality**- Having the same rights and privileges seen through acceptance, tolerance, and fairness.
7. **Esthetics** - Identifying the qualities of objects, events, and persons that provide satisfaction as seen through creativity, sensitivity and appreciation.

H. **Office Hours**: Each faculty keeps office hours for the purpose of conferring with students. Students are encouraged to make appointments with faculty to discuss their needs and/or problems related to their studies. Appointments for review of examination results must be completed **prior** to the next scheduled exam. Please use the phone at the reception desk to call the faculty member’s office before your appointment.

V. **EXAMINATIONS**

1. Exams consist but not exclusive of:
   a. Multiple choice questions.
   b. Alternate format questions.
   c. Dosage calculations must reveal the methodology utilized to acquire the answer.

2. The student will be allowed (as close to) 1.5 minutes per test item as is possible, given the class schedule time. The posted CTC schedule allows two hours for a final exam.

3. Written examinations will be given on dates noted on the daily plan. If a student cannot attend an examination, the course coordinator/professor must be notified **before the examination is given**. If the student fails to notify the faulty they will receive a grade of “0” for that exam or mini exam. It is your responsibility and a requirement to notify the faculty in advance of any absence to retain the privilege of sitting for a make-up exam without grade penalty. **Make-up examinations will be in essay format**. Students requiring a make-up exam will report to the Nursing building or Student Testing Center at a designated time on the Friday following the missed exam. The location will be disclosed to the student prior to the make-up exam. If the rescheduled opportunity is missed there will be no other opportunities afforded. **VNSG 1405 follows the testing policy published in the Department of Nursing and Allied Health Student Handbook.**

4. ScanTrons® are the only source utilized in calculating examination scores. These should be turned into the faculty on the first day of class.

5. On examination day, the following rules will apply. All backpacks, book bags, or cell phones should not be brought into the classroom. No drinks, food, hats, jackets or wearing of watches are allowed on exam days. You will have an empty seat next to you at all times.

6. A **student** scoring 70% or less on any exam **must make an appointment** with the course faculty to review exam and for counseling. Appointments are optional for scores higher than 70%. The appointment must be made with the faculty within one week of examination date. It is strictly the **student’s responsibility** to set up this appointment.

7. An exam review will be provided after each exam. The date, time and place will be announced prior to the exam. Attendance is voluntary.
VI. SEMESTER GRADE COMPUTATIONS

A. The course grade is determined by written examinations and quizzes (mini exams).

B. The requirements for determining course grades are:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini exams (10 @ 10 points each)</td>
<td>100 points</td>
</tr>
<tr>
<td>Exams (4 worth 50 points each)</td>
<td>200 points</td>
</tr>
<tr>
<td>Comprehensive Final</td>
<td>100 points</td>
</tr>
<tr>
<td><strong>Total Points Possible:</strong></td>
<td><strong>400 points</strong></td>
</tr>
</tbody>
</table>

Students must obtain a 70% average total for the mini exams and exams in order to pass the class. **No grades will be rounded.** The criteria utilized for grade computations will be determined by the course faculty and discussed on the first day of class.

**Blackboard does not record official grades; it is a courtesy to students to keep track of their points. WebAdvisor is the official site for grades.**

C. A mini exam(s) will be given at the beginning of a class. It is your responsibility to be present and on time for class. If you are absent for a mini exam you will receive a score of “0” without the opportunity for a make-up mini exam. **No exceptions!**

D. Class behavior is based on attitude, civility, behavior, willingness to read the chapters prior to coming to class and level of participation in classroom discussion and activities. You will be given a “Pink Slip” (disciplinary written warning) for disruptive behavior.

VII. NOTES AND ADDITIONAL INSTRUCTIONS FROM THE FACULTY

A. **Course Withdrawal:** Consistent with CTC Policy.

B. **Administrative Withdrawal:** Consistent with CTC Policy.

C. **Incomplete Grade:** Consistent with CTC Policy.

D. **Cellular Phones:** Cellular phones and beepers will be turned off during class and laboratory periods. Cell phones will **not be allowed** on desks during examinations. Repeated warnings “Pink Slips” about cell phone disruptions may lead to negative student academic consequences (i.e. point deductions from final grade). This will be left at the instructor’s discretion.

E. **American’s With Disabilities Act (ADA):** Disability Support Services provide services to students who have appropriate documentation of a disability. Students requiring accommodations for class are responsible for contacting the Office of Disability Support Services (DSS) located on the central campus. This service is available to all students, regardless of location. Explore the website at [www.ctcd.edu/disability-support](http://www.ctcd.edu/disability-support) for further information. Reasonable accommodations will be given in accordance with the federal and state laws through the DSS office.

F. **Civility:** Individuals are expected to be cognizant of what a constructive educational experience is and be respectful of those participating in a learning
environment. Failure to do so can result in disciplinary action up to and including expulsion.

G. **Support Services**: The College offers a variety of support services to students. Refer to the CTC website: [http://www.ctcd.edu/students/current-ctc-students/academic-support/](http://www.ctcd.edu/students/current-ctc-students/academic-support/).

H. **Non-Discrimination**: Consistent with CTC Policy.

I. **Inclement Weather**: Information about class cancellation or delay because of inclement weather can be obtained by listening to KNCT-FM (91.3 FM) or by calling (254) 501-3100. (CTC Inclement Weather Information Line).

VIII. COURSE OUTLINE

**Unit 1:**
1. Introduction to the Human Body
2. Basic Chemistry
3. Cells
4. Cell Metabolism
5. Microbiology
6. Tissues and Membranes
7. Integumentary System

**Unit 2:**
8. Skeletal System
9. Muscular System
10. Nervous Tissue and Brain
11. Spinal Cord and Peripheral Nerves
12. Autonomic Nervous System
13. Blood

**Unit 3:**
14. Anatomy of the Heart
15. Function of the Heart
17. Functions of the Blood Vessels
18. Endocrine System

**Unit 4:**
19. Lymphatic System
20. Immune System
21. Respiratory System
22. Digestive System
23. Urinary System

**Unit 5:**
24. Water, Electrolyte, and Acid-Base Balance
25. Reproductive Systems
26. Human Development and Heredity
IX. TEACHING- LEARNING ACTIVITIES
Students will be assigned learning activities to accomplish course outcomes.
My signature acknowledges that I have read and understand the syllabus, course format and testing policy for VNSG 1405, Health Science, and I agree to abide by the terms set forth in this document.

__________________________
Printed Name

__________________________
Signature Date