CTK HEALTHCARE AND CAREER INSTITUTE

SCHOOL CATALOG

Volume XV

July 2025

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HISTORY

CTK Healthcare & Career Institute (CTK) is a career school established in 2004 with objectives of providing individuals with basic education and training, career counseling, as well as job placement assistance. Originally founded as a Nurse Aide training school, CTK Healthcare & Career Institute expanded its course offerings to include longer programs like Pharmacy Technician and Patient Care Technician Trainings. Training provided by CTK Healthcare and Career Institute prepares students for their rewarding new careers by providing the high-quality instruction by dedicated instructors using up-to-date equipment.

CTK Healthcare and Career Institute is approved and regulated by Texas Workforce Commission, Career Schools and Colleges and Texas Health and Human Services (HHS), Nurse Aide Training and Competency Evaluation Program (NATCEP) and accredited by Council on Occupational Education (COE).

CTK offers workforce literacy education programs focused on healthcare disciplines. The goal is to increase the chance of obtaining and/or sustaining employment with focus on individual's ability to read, write and speak English, compute and solve basic problems at levels necessary to function in the society.

Facilities & Equipment

The School is conveniently located within a busy mid-city commercial area (and major bus routes), one block from Irving Mall (B/w HWY183 & I-161). Our facility is about 4650 square feet and offers a conducive atmosphere for learning with a student lounge, and classrooms equipped with the required medical and computer equipment necessary for training. We have also provided a TV/VCR, Desktops, and projectors for additional virtual training necessary to increase student participation and understanding during lectures. We also have projectors for power point presentations, Human Manikins and AED to develop skills and CPR training. The lab for the Nursing, Pharmacy Technician, and IT program is equipped with a patient bed, height and weight machine, and enough devices necessary to train students for these programs. CTK also carries enough numbers of Stethoscopes for the students to train how to take Blood Pressure readings. CTK also housed sophisticated healthcare equipment's like EKG Machines, Nursing Beds, equipment's related to phlebotomy and Pharmacy. It also housed Conference room, library and Computer lab equipped with many computers readily available for students to use for their educational needs. It has separate LVN labs with 10 full manikins with beds, weighing machine, wheelchairs, and all logistics required for LVN program.

Male and Female restrooms (3) are located right in the building by the hallway right outside the classroom areas. Snack and Soda dispensers are also located in the lobby by the student lounge. A computer station is also located near the lab and classrooms. A conference room is located next to the administration office and includes all equipment necessary for the student library. A first aid kit and fire extinguisher are in a convenient place close to the student lounge.

VISION, MISSION, VALUES, OBJECTIVES & STRATEGIC PLANNING

Vision

Providing excellence in healthcare education and having the passion to provide effective services to the students and community the school serves.

Mission

To offer quality professional trainings in Healthcare, Information Technology and Business related disciplines.

Core Values

The CTK administrators, faculty and staff has established core values to accomplish its goals. Our core values are:

Cooperative: work with employers and students to perform.
Fairness: treat students and employees for their success.
Integrity: to speak truth without hidden agendas.
Diversity: Value various aspects of diversity among students, employees and employers.

Along with the aforesaid broader goals, CTK also publishes its specific objectives to provide a framework of the school's planning and services to achieve its mission as included below:

1. To establish training programs, support services, and a student-centered atmosphere for promoting student success.
2. To provide educational offerings in its facilities that can best serve the school's clientele, which may lead to an associate degree, diploma, or certificate.
3. To provide flexible scheduling, learning options and delivery methods.
4. To increase instructional stability, educational quality, and financial resources for our students.
5. To increase the use of technology for all our educational offerings to mirror the technology used professionally throughout the healthcare industries.
6. To promote educational opportunities without regard to race, gender, ethnicity, disability, socioeconomic status, or age, for all qualified candidates who desire to become healthcare professionals.
7. To pursue articulation agreements with other institutions of higher education.
8. To establish program articulation agreements between CTK and the area Independent School District (ISD) systems.
9. To maintain community relations throughout its service areas, and to promote economic and workforce development to broaden our outreach for qualified candidates for training.

Objectives

1. Provide our students a quality education by focusing on the importance of labor market trends, technology advancement, and educational material updates.
2. Establish a clean and well-organized educational environment by providing students up-to-date equipment and realistic work environment settings.
3. Hire the most qualified administrative staffs and educational instructors as possible, who possess specific work experience and educational backgrounds along with updated professional development provided and supported by this institution.
4. Have enough staffs for student needs, including Admissions, Student Services, and Placement Services.
5. Encourage outside clinics and employer for visits, evaluation of classrooms, involvement in Advisory Committees for curriculum enrichment and growth to better prepare students in a competitive labor market.

Non-discrimination Policy

CTK is committed to maintaining a fair and respectful environment for study. In accordance with federal and state law, the school prohibits harassment of or discrimination against any person because of race, color, sex (including sexual harassment and pregnancy), sexual orientation, gender identity, ethnicity or national origin, religion, age, genetic information, disability, or veteran status by any of its member on campus. Incidents of harassment and discrimination will be met with appropriate disciplinary action, up to and including dismissal or expulsion from the program.

Counseling/Advising Services

Whenever an instructor believes that if a student need counseling due to his/her performance on quizzes, tests, or lab works s/he notifies the student service coordinator (SSC). The SSC is responsible for facilitation of the meeting between students and the school director/CAO. The school director or his designee is directly involved in counseling of the students in order to encourage them in their academic and employment goals. If the counseling is an emergency, the Academic Director or the designee of the CAO serves the student in need. To choose the right program of study as per their interest the Admission Officer organizes a meeting between the academic director (AD) and the prospective student to describe in-depth the pros and cons of each program.

Family Educational Rights and Privacy Act of 1974

This institution complies with the Family Educational Rights and Privacy Act (FERPA), which provides students certain rights related to their educational records. The following is a description of those rights:

1. The right to inspect and review the student's educational records within 45 days of the day the Institution receives a written request for access. Students should submit

to the President written requests that identify the record (s) they wish to inspect. A School Official will make arrangements for access and notify the student of the time and place where the records may be inspected.

2. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception, which permits disclosure without consent, is disclosure to institution officials with legitimate educational interests. An institution official is a person employed by the institution in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff). A person or company with whom the Institution has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another institution official in performing his or her tasks. An institution official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility. Upon request, the Institution discloses educational records without consent to officials of another institution in which a student seeks or intends to enroll.
3. Directory information is information that may be unconditionally released to third parties by the school without the consent of the student unless the student specifically requests that the information not be released. The school requests students to present such requests in writing within 10 days of the date of enrollment. Directory information includes the student's name, address(s), telephone number(s), birth date and place, program undertaken, dates of attendance, and certificate or diploma awarded.

The right to file a complaint with the U.S. Department of Education concerning alleged failures by this Institution to comply with the requirements on file is as follows:

Family Policy Compliance Office
Department of Education,
600 Independence, SW
Washington, DC 20202-4605

Library Services

The library is along with the computer room. The Student Service Coordinator (SSC) is responsible to serve the students in need of reference books, lab equipment's, technological devices, such as a DVD, projector, manikins, manuals to use state-of–the-art machines. The reference books, journal articles, books related to healthcare disciplines and science are stored in a drawer. Interested student can issue the book of their interest through student service coordinator.

Financial Services

In an effort, to assist the students with their healthcare education, CTK offers some promotional discounts in its tuition and fees by making public through, emails, flyer, brochures, notice, and on the school website. Furthermore, the Finance and Admissions Offices offer flexibility by providing a payment plan. The school also accepts credit card payments in addition to cash or check payments. Moreover, the school does not charge late payments or interest charges. CTK may offers private loans for students in need, if they are qualified as per the private loan company requirements. CTK can help to process the loan with a fee as indicated in enrollment form.

CTK ADMINISTRATIVE PERSONNEL

• Director	Dr. Prem Adhikari
• Academic Dean/Chief Financial Officer/ IT/Compliance	Dr. Arjun Adhikari
• Chief Administrative, Admission, Financial, Emergency and SSC	Ms. Priyanka Ayer
• Placement, Account, Human Resource Coordinator	Mrs. Radhika Chhetri
• Medication Aide Program Director	Dr.. David Baba
• Patient Care Technician Program Director	Dr. Chhabi Poudel
• Pharmacy Technician Program Director	Dr. Arjun Adhikari
• Nurse Aide Program Director	Ms. Rekha Bhattarai
• LVN Director	Mrs. Rose Elam

Instructor's Information: Information about instructors is provided below

Name	**Employment Year**	**Degree**	**Experience(yrs)**	**Courses Taught PT/FT**	**Conferring Institute**
Mrs. Rekha Bhattarai	2019	BSN	5	Nursing **PT**	NAMS, Nepal
Dr. Prem Adhikari	2013	PhD	8	CPR **FT**	Univ North Texas
Dr. Arjun Adhikari	2020	PhD	15	Pharmacy/PCT **FT**	Baylor University
Mrs. Moni Subedi	2021	BSN	3	Nursing **PT**	U Texas Arlington
Mrs. Uma Sapkota	2020	MSN	25	Nursing **PT**	U Texas Arlington
Dr. David Baba	2021	Ph.D./MSN	10	Med Aide/PCT **FT**	Univ Ghana
Mrs. Roberta Price	2021	LVN	20	Nursing **FT**	Brown Mackie College
Mr. Eric Forson	2021	Pharm Tech	5	Pharmacy **PT**	Collin College, TX
Mrs. Rose Elam	2024	MSN	32	LVN	Mary Hardin Univ, TX
Ngozi May	2022	LVN	10	BSN	Western Governor Univ
Portia Tyson	2024	LVN		BSN	West Coast Univ, TX
Ebahi Mesike	2025	CNA	5	LVN	Concord Career College

Amar Lamichhane	2025	MS	10	Sociology	California State University, CA
Rewati Dhakal	2024	MA	10	English	Tribhuvan University
Krishna Acharya	2024	MS	15	Math	UT Arlington, TX
Monica Molenski	2025	Associate	2	Dental	Rowan College of S. Jersey
Dr. Masooma Khalid	2025	Bachelor Medicine	20	Medical Assistant, Billing, Coding	University of Punjab
Carey Maceira	2023	Bachelor	20	Medical Assistant, Billing, Coding	Western International Univ

Instructors employed by CTK Healthcare & Career Institute are approved by HHSC and TWC/CSC and Council on Occupational Education (COE) meet or exceed the minimum requirements to teach as specified by the program licensing agencies.

PROGRAM DESCRIPTION

Nurse Aide Program

The Nurse Aide program is approved by THHS and TWC. It is a comprehensive course designed to teach students the skills and abilities essential to the provision of basic care to patients and residents in hospitals and long-term care facilities. Graduates of this program will be able to communicate and interact effectively with patients, assist patients in attaining and maintaining maximum functional independence, while observing patient rights. They will learn how to perform basic first aid, CPR, take vital signs, apply the elements of basic nutrition in meal planning, and follow infection control measures. Additionally, they will be able to apply proper body mechanics in bed making, lifting, and turning patients. Graduates of this program may find entry-level employment as a nurse aide with hospitals and nursing homes. Students will receive CTK Healthcare & Career Institute's Certificate of completion after the completion of the training, a requirement for entry level job as well as to take license Exam for Certified Nurse Aide (CNA) within a year of completion.

Competencies: Upon completion of this course

1. Graduates will be able to communicate and interact effectively with patients, assist patients in attaining and maintaining maximum functional independence, while observing patient rights.
2. Graduates will learn how to perform basic first aid, CPR, take vital signs, apply the elements of basic nutrition in meal planning and follow infection control measures.
3. Graduates will learn to apply proper body mechanics in bed making, lifting and turning patients.
4. Graduates will receive a Certificate of Completion and be prepared to sit for the Texas

Nurse Aide Competency and Evaluation Program (NATCEP) exam. Upon successfully passing the Texas NATCEP, they will be prepared to begin their rewarding career in healthcare as a Certified Nurse Aide (CNA), and will be able to demonstrate competence and proficiency in the following categories of skills:

- Communication and interpersonal relationships.
- Safety and infection control.
- Personal care procedures.
- Vital signs.
- Nutritional requirements and techniques.
- Admission, transfer, and discharge procedures.
- Exercise and activity.
- Elimination.
- Unsterile warm and cold applications.
- Care to clients with special needs.
- End of life care.
- Care to clients with cognitive impairment.

The Student Learning Outcome [SLO] of the program can be measured using followings techniques-

1. Students will be able to demonstrate knowledge of common elements required for certification by Texas Board of Nursing. This can be achieved by student achievement of a passing grade on instructor developed and administered final examinations.
2. Students will be able to demonstrate compliance with standards of practice for nursing assistants. This will be measured by an administered skills test given on exams that contains core elements of practice such as privacy, safety dignity and HIPPA.
3. Students will be able to demonstrate competence with all skills required for certification. This will be measured by an administered skills test given in an exam.

The textbook: Hartman's Nursing Assistant Care: The Basics, 4e 4th Edition.
ISBN-13: 978-1604250503
ISBN-10: 160425050X
This is available for purchase from CTK Healthcare and Career Institute, through local bookstores or On-Line retailers such as alibris.com, Amazon.com, Barnes&Noble.com and elsevier.com. Please contact the office for more information.

Continuing Education Seminar for Certified Nurse Assistant (CNA-Ce)

Students will review the role of the Nurse Aide and have an overview of the curriculum in the State of Texas; theory and Practices.

Competencies: Upon completion of this course, students will be able to review all the skills related to

1. Introduction to Long Term Care,
2. Personal Care Skills,
3. Basics Nursing Skills,
4. Restorative Services,
5. Mental Health and Social Service's Needs,
6. Social Skills

Medication Aide Training

The Medication Aide program is approved by TWC and THHSC. Its objective is to prepare students to safely administer or to assist residents for self-administration, medications in specific settings through lecture, skills lab, and clinical experiences. Students will also be able to facilitate or assist the resident with the administration of insulin, prepare for safe administration of medications to clients in assisted living facilities, maintain aseptic conditions, understand basic pharmacology, follow appropriate procedures for documentation etc. After the completion of the program students will receive Certificate of completion of the program, which makes the graduates eligible to take license Exam for entry level Medication Aide Technician.

Competencies: After completion of the program, students are competent to

1. Assist the resident in long-term care facility with the administration of insulin.
2. Prepare medications for safe administration in assisted living facilities.
3. Maintain aseptic conditions.
4. Understand basic pharmacology terminology, abbreviations, classifications, drug actions, purpose and effects of medications, drug information resources, drug labeling requirements, etc.
5. Assist self-administration of medication to the patients.
6. Follow safe and proper procedure for preparing, administering, documentation, and maintaining medications
7. Follow appropriate procedures for documentation and reporting of medication administration to the licensed healthcare professional on duty at the healthcare facility

The Student Learning Outcome [SLO] of the Medication Aid program can be measured using followings techniques-

1. Students will be able to demonstrate knowledge of common elements required for certification by Medication Aid office of the state of Texas. This can be achieved by student achievement of a passing grade on instructor developed and administered final examinations.
2. Students will be able to demonstrate compliance with standards of practice for Medication Aid technician. This will be measured by an administered skills test given on exams that contains core elements of practice such as administration of Medication

and impacts of drugs in various organ system, route of delivery of drugs in human body including privacy, safety dignity and HIPPA.

3. Students will be able to demonstrate competence with all skills required for impacts of various disease with the age and pediatrics patient including the care for Immuno-Compromised Residents. This will be measured by an administered skills test given in an exam.

The textbooks: Mosby's Textbook for Medication Assistants 1st Edition.
ISBN-13: 978-0323046879
ISBN-10: 9780323046879

This is available for purchase locally or through On-Line retailers such as Amazon.com, Barnes&Noble.com and elsevier.com. Please contact the school director for more information.

Medication Aide Training Seminar

Students will review the scope and role of Medication Aide technician including related concepts as a refresher course. The duration of the course is 7 (seven) contact hours. Passing of this seminar may fulfill the Continue Education requirement for Medication Aide technician as per the State of Texas.

Home Health Aide Seminar (HHA- Seminar)

- Qualities and Characteristics of the HHA – This session will review the role of the HHA in Home Care with focus on membership in the health care team and responsibilities within the plan of care.
- Infection Control – This session will review precaution for preventing the spread of microorganism with focus on the chain of infection, standard precautions procedure and updates from the CDC and other evidence-based procedures. The session will also review the most common pathogens.
- The House Environment – This session will focus on the HHA evaluation of the Home and Communication with the skilled nurse and/or nurse completing the start of care and recertification evaluation.
- Housekeeping issues – During this session the HHA will be oriented to housekeeping tasks that may be assigned with the client's care. This will also include discussions of feelings and willingness to perform housekeeping task.
- Safety – The safety session will include review of safety hazards in the home and emergency procedures that may be necessary. This will include discussion of frequent safety issues.
- Dietary considerations and meal planning – Review of meal planning and special diets.
- Meal planning and cooking may be assigned to the HHA and this session will include evaluation of cooking skills and meal planning.
- Personal care – Personal Certified Nurse Aide skills will be reviewed and discussed with focus on the home environment.

- Observation, reporting and recording – During this session students will discuss, and role play observation, reporting and recording in the role of a Home Health Aide.
- Personal Safety – Issues of personal safety while in the home will be discussed.
- Ethics – This session will discuss ethical behavior expected of an HHA focusing on Honesty, Trustworthiness and Truthfulness related to working in someone's home.\

Pharmacy Technician Training

This program is approved by TWC. This training teaches students the knowledge and skills necessary to thrive in the ever-changing pharmacy industry. Pharmacy tech students learn about compounding, computer processing, dispensing, mathematics, drug/body interactions, and drug delivery systems among other subjects. Additionally, students practice their customer service skills during their work-based activities and learn about different pharmaceutical environments such as retail, hospital, and small business. Students will also develop real-world workplace skills like communication and customer service, which they will use in their mandatory practicum placements in workplaces in community pharmacies. After the completion of the program, students will receive the Certificate of completion of the program and Trainee license for Pharmacy technician, which makes them eligible for entry-level work as well as to pass the license exam within two years of graduation.

Competencies: Upon completion of this course

1. Graduates may find employment with local community pharmacies, hospitals, retail pharmacies, mail-order drug companies and insurance companies. They will be able to perform all duties required of a Pharmacy Technician in any pharmacy practice setting, as a pharmacy technician trainee. However, graduates are required to pass the Pharmacy Technician Certification Board (PTCB) within two years of trainee license to continuously work in any pharmacy practice setting.
2. Graduates will learn to prepare prescription orders under the supervision of a licensed pharmacist, perform applicable pharmacy calculations, provide customer service and comply with both federal and state regulatory laws.
3. Additionally, completion of the program assists students in their preparation to take the certification exam offered by the Pharmacy Technician Certification Board (PTCB). Upon successfully passing the exam, graduates will be able to gain the designation of Certified Pharmacy Technician (CPhT).

These Students learning outcome [SLO] will be evaluated using the following techniques-

I. Students will be able to demonstrate knowledge of common elements required for certification by PTCB. This can be achieved by student achievement of a passing grade on instructor developed and administered final examinations.
II. Students will be able to demonstrate compliance with standards of practice for Pharmacy Technician. This will be measured by an administered skills test given on exams that contains core elements of practice such as privacy, safety, accuracy of calculation for the doses, and HIPPA.

III. Students will be able to demonstrate competence with all skills required for certification.

Textbooks

- PassAssured (https://passassured.com). PassuAssured LLC. Orange, TX
- Pharmacy Technician Certification: Study Guide 2020 and 2021. Test Prep Books.

Reference Books

- ❖ Mosby's Pharmacy Technician – Principle and Practice (5th ed.). Elsevier ISBN 978-0-323-44356-2
- ❖ Workbook/Lab book: Mosby's Pharmacy Technician – principle and practice (5th ed.): Workbook and Lab Manual. Elsevier. ISBN 978-0-323-44357-9
- ❖ Software: Pharmacy Management Software for Pharmacy Technician – A worktext (3rd ed.) DAA Enterprises, Inc. ISBN 978-0-323-42832-3
- ❖ Math Calculations for Pharmacy Technicians-A Work Text, by Eugenia M. Fulcher, BSN, MEd, EdD, RN, CMA (AAMA) and Robert M. Fulcher, BS Chem, BSPh, RPh, © 2013, ISBN: 978-1-455-70966-3

Patient Care Technician (PCT)

The Patient Care Technician (PCT) Program prepares students to work as an entry-level Patient Care Technician in a clinic, hospital, Emergency Room, wound care centers or long-term care facility. Students will be able to use basic laboratory procedures, infectious diseases, check vital signs, perform CPR and First Aid, help with activities of daily living to provide comfort care, assist in medical examinations, perform good phlebotomy practices, electrocardiograms (EKG / ECG), Patient record charting through a computer program, and also be able to communicate patient information electronically as needed in a required format. In short, this program prepares students with the medical and patient care skills necessary to work in entry-level position such as Nurse Aide, EKG technician, Phlebotomy technician, Electronic Medical Record (EMR) technician, Infection Control Technician, as well as provide significant foundation of Knowledge and skills necessary to enroll in higher level allied health academic career. This program is taught with a combination of lecture, laboratory, and practical exercises in the medical laboratory and with real-world experience during the clinical externship portion of training conducted off-campus at either long-term care and/or Clinical facilities. Upon successful completion of this program, the student will be able to receive completion of Patient Care Technician (PCT) and Phlebotomy Certificate, which makes them eligible to take Entry level job as Phlebotomy Technician, EKG technician, EMR technician as well as to take National Certification Exam for Registered technician for Phlebotomy, PCT, EKG. Furthermore, students may receive Certificate of completion for Nurse Aide training, a requirement for entry level job as well as to take license Exam for Certified Nurse Aide (CNA) within a year of completion.

Competencies: upon completion of this course, the graduates can successfully perform

duties such as

1. Respond to patient calls and requests for assistance
2. Bathing, dressing, grooming, assisting with personal hygiene, changing dressings and wound care.
3. Serving meals and feeding patients if they are unable to feed themselves
4. Monitoring and recording vital signs - temperature, blood pressure, pulse, and respiration rates
5. Observing, recording and reporting a patients' physical, mental, and emotional condition
6. Able to take and understand Electrocardiograms (EKGs) reports
7. Moving patients, transferring patients to and from a bed or wheelchair and assisting with walking
8. Making beds and keeping patient rooms clean and neat
9. Learn about infectious disease and aware the patients and communities
10. Assisting doctors and nurses during examinations and treatments
11. Able to communicate and chart patience medical record information electronically using Electronic Health Record (HER) system
12. Able to perform basic phlebotomy procedures
13. Able to evaluate patients for ability to withstand venipuncture procedure
14. Explain the venipuncture procedure and answer patient questions
15. Perform basic point of care testing, such as blood glucose levels on patients
16. Prepare blood, urine, and other body fluid specimens for testing according to established standards.
17. Able to provide basic home health services.
18. Able to apply the method for infection control.
19. Able to apply the procedures to control the infection in the facilities
20. Record a physician's interactions with patients and assist the clerical team
21. Prepare for advance nursing degree

These Student learning outcomes [SLO] will be evaluated using following techniques.

I. Students will be able to demonstrate knowledge of common elements required for certification by Nurse Aide Registry. This can be achieved by student achievement of a passing grade on instructor developed and administered final examinations.

II. Students will be able to demonstrate compliance with standards of practice for PCT. This will be measured by an administered skills test given on exams that contains core elements of practice such as privacy, safety, accuracy of calculation for the doses, and HIPPA.

III. Students will be able to demonstrate competence with all skills required for certification. This will be measured by an administered skills test given in the Exam about Phlebotomy or EKG practice.

Textbooks

1. Opret Education, - ISBN-978-1-944471-59-0
    - Patient Care Technician Textbook-Theory & practical Fundamentals
    - Phlebotomy Technician Textbook- Theory and Practical Fundamentals

- EKG Textbook- Theory and Practical Fundamentals

Reference Books

2. Nursing Pathways for Patient Safety, 1st edition by National Council of State Boards of Nursing
3. Hartman's Nursing Assistant Care: The Basics; Fourth edition; ISBN-13:9781604250145; ISBN: 1604250143; Jetta Fuzy, RN, MS.
4. Computers in the Medical Office, 3rd edition by Susan M. Sanderson
5. Electronic Health Record Book Search in Computer

Medical Assisting (MA)

Medical Assisting Training course prepares graduate to work as an entry-level Medical Assistant. The objective of the Medical Assisting program is to train students in the clinical and administrative areas of health care. The student will gain knowledge and skills required for entry-level employment in a healthcare profession. This program includes wide range of specialty area trainings including Medical Office Management, Medical Coding, Phlebotomy, and Electronic Health Record. The students gain competencies on both administrative and clinical field. While the administrative competences include medical bookkeeping, medical insurance and coding, the clinical competencies include phlebotomy techniques, EKG procedures, monitoring vital signs, assisting in physical examinations and minor surgery, specimen collection, electrocardiograms, and basic laboratory tests. Students completing the medical assisting training program may seek the entry-level positions in a doctor's office, clinic, or other medical facility as Medical Assistant, Clinical Laboratory Aide, Phlebotomy or EKG Technician, Lab Assistant, Personal Care Attendant, Medical Records, Hospital Donor Unit Assistant, Blood Bank Donor Unit Assistant, Front Office Assistant Manager, Back Office Laboratory Assistant, and Medical Secretary. While job functions will vary widely based on the employer, the Medical Assisting may schedule appointments and referrals, take a patient's medical history and vitals, and assist the licensed medical staff with clinical procedures. The externship is designed for providing students opportunity to apply and enhance knowledge and skills learned in school to real-life conditions. The students are required to complete the externship hours with required skills before graduation. They will be challenged to develop the ability to work independently and in teams, use communication and interpersonal skills effectively, and to be innovative in solving problems, as they will study to develop career skills. Upon successful completion of this program, students will be able to receive completion of certificate for Medical Assistant, Phlebotomy, and Billing & Coding.

Upon completion of this course the graduates can successfully perform duties such as

1. Demonstrate computer literacy in the operation of software applications to complete required processes
2. Enter patient information into the electronic medical record computer system accurately and completely
3. Perform patient assessment, procedures and care completely and accurately
4. Utilize policies and procedures required to maintain patient confidentiality
5. Employ effective communication skills in the workplace.
6. Assisting physicians in patient preparation and examination

7. Communicating professionally and providing instructions to patients
8. Performing routine laboratory tests, such as blood work, venipuncture, urinalysis, and electrocardiograms
9. Recording patients' vital signs and managing patient records
10. Preparation of examining room instruments and apparatus, purchase and maintain supplies and equipment, including neat and cleanliness examining rooms.

Note: Students will be prepared for the Certified Medical Administrative Assistant (CMAA), and Certified Billing and Coding Specialist (CBCS) exams after completion of the program. Student learning Outcomes [SLO] will be measured by various methods. After completion of the program, student will be awarded with seminar certification in Billing & Coding, and for Medical assisting along with Seminar certification in Medical Secretary and Clinical Medical Assisting.

The textbooks – Recommended textbooks for Medication Assistants program may include:

- Today's Medical Assistant - Text and Study Guide Package: Clinical and Administrative Procedures,(1st Edition) by Kathy Bonewit-West BS MEd, Sue Hunt MA RN CMA (AAMA) and Edith Applegate MS (Dec 15, 2016)
- Today's Medical Assistant - Text and Study Guide Package: Clinical and Administrative Procedures,(1st Edition) by Kathy Bonewit-West BS MEd, Sue Hunt MA RN CMA (AAMA) and Edith Applegate MS (Dec 15, 2008)
- Clinical Procedures for Medical Assistants (7th Edition) By Kathy Bonewit-West BS MEd (2007)
- Study Guide for Clinical Procedures for Medical Assistants. (7th Edition) By Kathy Bonewit-West BS Med (2008)
- Math and Dosage Calculations for Health occupations By Renee A. Dawe (Nov 9, 1992)
- Customer Service in Health Care: A Grassroots Approach to Creating a Culture of Service Excellence by Kristin Baird (Jun 29, 2000)

SQL BI & Java

[Structured Query language, Business Intelligent Developer & Java Analyst]

This program teaches the Extract, Transform, Load (ETL) in depth using SQL Server Integration Services (SSIS) Package, Analytics with R (R Studio), Analytics with Python, Integrating Power BI with R and Python, Power Automate (Flow) Power Apps and others. Upon completion of the program students will be confident on key achievement about developer. Furthermore, they will be able to use Python or R, BI & Java tool to understand Data Analytics. Moreover, after completion of the program students will be able to perform projects on their own. And, finally students will be able to successfully secure the job through effective job interviews on technologies they have learnt in the program.

Upon completion of this course the graduates can successfully perform duties such as

11. Demonstrate programming skills application for data analysis.
12. Demonstrate the ability to store and retrieve data, execute queries, joining and breaking data tables, develop indexes using query language and manage database architecture.
13. Able to work as database administrator.

14. Assess market strategies related to products, markets, and trends.
15. Able to identify current and potential customers.
16. Collect, analyze and validate business data to determine a corporate's need.
17. Able to handle and maintain JAVA-based software and applications, contributing to all stages of the software development lifecycle

Note: Students are expected to have a fully functional Laptop, which can do computational tasks. Microsoft office should be installed in the laptop. Software that are needed for each course will be discussed in the beginning of the course. Course materials will be provided by the instructor as well as books will be recommended.

The textbooks – Recommended textbooks for Structured Query language, Business Intelligent Developer & Java Analyst [SQL BI & Java] program may include:

- Java: A Beginner's Guide, Third Edition, Author: Herbert Schildt
- Hands-On Selenium WebDriver with Java: A Deep Dive into the Development of End-to-End Tests, 1st Edition, Author: Boni Garcia.
- SQL for Data Analysis: Advanced Techniques for Transforming Data into Insights by Cathy Tanimura

Licensure Vocational Nursing (LVN)

The mission of the CTK Healthcare and Career Institute Vocational Nursing Program is to train and develop a graduate vocational nurse who is educationally prepared to provide safe and compassionate patient-centered care within the established legal, ethical and professional standards. This preparation provides the graduate with the skills necessary to function in a structured health care setting as a member of the multidisciplinary team utilizing the nursing process and sound clinical decision-making when providing care within the licensed vocational nurse's scope of practice, for individuals with commonly occurring and recurring health concerns with predictable outcomes. The graduate is aware of the changing roles of the vocational nurse and accepts responsibility for their own personal and professional growth.

Competencies: Upon completion of this course

- The graduate will assist in determining the health status and health needs of patients, assist in the formulation of goals and a plan of care in collaboration with the patient and health care team, implement the plan of care within legal and ethical boundaries, implement structured teaching plans, assist in evaluating the patient's response to interventions, provide direct care to assigned patients using the problem-solving approach.
- The graduate will collaborate with the patient and health care team to provide direct care, participate in the identification of patient needs for referrals, and assist in the coordination of resources for the provision of care.

- The graduate will participate as an advocate for the patient, demonstrate accountability for his/her own nursing practice, and demonstrate involvement in the development and practice of vocational nursing standards.
- The graduate will demonstrate knowledge of the Texas Nursing Practice Act, as well as national safety standards while implementing measures to promote quality and a safe environment for patients, self, and others.
- The graduate will accept and make assignments, and supervise care provided by others while taking into consideration patient safety, patient or unit need, and the knowledge, skill and ability of their self and others.

These Students learning outcome (SLO)

The nursing curriculum consists of a variety of courses that may be didactic only, or a combination of didactic, skills and clinical performance. SLO of the students are measured with the grades which are based on achievement related to the following activities: class projects or assignments; examinations; quizzes; written work; and evaluation of skills lab and clinical performance ability. Attendance in the skills laboratory and patient care clinical is mandatory because the learning activities cannot be easily rescheduled for make-up. The weighting of grades is defined in each syllabus.

Examinations in the program consist of NCLEX-PN style multiple choice and alternate item format questions. The difficulty level of exam questions according to Bloom's Taxonomy of cognitive levels, progresses through each of the four quarters in the program. The lower levels of thinking are considered to be at the remembering and understanding type of questions.

For details refer to the LVN student handbook

Text Books and References

- Thompson, G.S. Understanding anatomy and physiology. Philadelphia, PA: F.A. Davis.
- Thompson, G.S. Workbook to accompany understanding anatomy and physiology. Philadelphia, PA: F.A. Davis.
- Burton, M., Smith, D. and Lugwig, L. Fundamentals of nursing care: concepts, connections, and skills. Philadelphia, PA: F.A. Davis
- Burton, M., and Smith. Study guide for fundamentals of nursing care: concepts, connections, and skills. Philadelphia, PA: F.A. Davis
- Davis's Nursing Skills Videos for LPN/LVN
- Myers, E. LPN notes: nurse's clinical pocket guide. Philadelphia, PA: F. A. Davis.
- Luz Martinez de Castillo, S. and Werner-McCullough, M. Calculating drug dosages: a patient-safe approach to nursing and math. Philadelphia, PA: F.A. Davis
- Watkins, Cynthis. Pharmacology Clear and Simple: A guide to Drug Classification and Dosage Calculations. Philadelphia, PA: F.A. Davis
- Vallerand, April and Sanoski, Cynthia. Davis's drug guide for nurses. Philadelphia, PA: F.A. Davis

- Dahlkemper, T. Anderson's caring of older adults holistically. Philadelphia, PA: F.A. Davis
- Williams, L. and Hopper, P. Understanding medical-surgical. Philadelphia, PA: F. A. Davis
- Williams, L. and Hopper, P. Study guide for understanding medical-surgical. Philadelphia, PA: F. A. Davis
- Gorman, L. and Anwar, R. Mental health nursing. Philadelphia, PA: F. A. Davis
- Linnard-Palmer, L. and Coats, G. Safe maternity and pediatric nursing care. Philadelphia, PA: F. A. Davis
- Linnard-Palmer, L. and Coats, G. Study guide for safe maternity and pediatric nursing care. Philadelphia, PA: F. A. Davis
- Dahlkemper, T. Nursing leadership management, and professional practice for the LPN/LVN. Linnard-Palmer, L. and Coats, G. Safe maternity and pediatric nursing care. Philadelphia, PA: F. A. Davis

Medical Insurance Billing & Coding Specialist [MIS] Program

Medical Insurance Billing & Coding Specialist [MIS] program trained students to review medical records, their accuracy, and process various medical documents. The completers of this program are able to work with health-related information where they can use the knowledge and skills to collect, analyze, store, retrieve, and communicate information for the support of operations, management, and decision-making process in a medical facility or health care related industry. Furthermore, they can advance the skills learned to computerize information. In this program, students receive instructional as well as hands-on training in anatomy & physiology, medical terminology, law and ethics, insurance billing and coding, various types of insurance and their claims, and reimbursements, medical office procedures, records management system software, accounts receivable, and accounts posting. In addition, completers will be able to compile, analyze, and maintain medical records of patients in a consistently professional manner that is aligned per medical, and regulatory requirements of the healthcare system. Moreover, they can classify medical and healthcare cases, including diagnosis, procedures, medical and clinic services, into the healthcare industry's numerical coding system. Furthermore, the completers are entitled for the jobs titled as Medical Biller, Medical Coder, Health Information Clerk, Health Information Specialist, Health Information Technician (Health Information Tech), Medical Records Clerk, Medical Records Coordinator, Medical Records Technician (Medical Records Tech), Registered Health Information Technician (RHIT), Account Receivable (AR) callers, Medical Billers & Coders, Revenue Cycle Manager, Health Information Technologists and Medical Registrars, Insurance Claims and Policy Processing Clerks, Medical Transcriptionists, Optician, Dispensing, Cardiovascular Technologists & Technicians, Health Information Technologists & Medical Registrars, Insurance Appraisers, Medical Secretaries & Medical Administrative Assistants.

Competencies: Upon completion of this course

- Able to code data and other related other information and classify materials according to standard systems.
- Collect medical information from patients and their family members & their histories.
- Able to communicate with management or other staff to resolve problems.
- Able to create databases to store electronic data and develop procedures for data management.
- Able to evaluate applicable laws and regulations to determine impact on organizational activities.
- Able to maintain security and medical facility records.
- Able to manage healthcare operations, market products, services, or events.
- Able to perform clerical work in medical settings and prepare healthcare training materials.
- Able to present medical research reports and promote educational institutions or programs.
- Able to supervise medical support personnel, test computer hardware & Software performance.
- Able to train caregivers or other non-medical personnel.

Objective and Marketable skills Delivery System

Each course of this program is an unique study which allows the student to have hands-on training in the concept involved in the course during lecture, lab and project activities. The lecture is set up for the combination of learning activities including simulating a Billing Coding business. Furthermore, each course will allow the student to learn about the working practice as a Biller and to implement the job of a Medical Billing Coding Specialist using Billing software. During the lecture time, instructor engage the students in the virtual classroom through lecture, lab & project work which are designed to help the students understand and utilize the importance of various aspects of specific Medical Insurance, Insurance Management, Billing procedure, Principles of Health Insurance (PHI), ICD-10, CPT-4 Coding. Additionally, Instructor fully engage the students through various analogies and pictorial views about Healthcare Common Procedure Coding System (HCPCS), Professional Development and Professional Coding Certification, Anatomy, Physiology, Medical Terminology, Health Information System and etc. In summary, during the delivery of the concepts and skills, students will be fully engaged to learn, understand, thinking with creativity and implement to the following marketable occupation-specific and technological skills .

- ❖ Assign the patient to diagnosis-related groups (DRGs), using appropriate computer software.
- ❖ Compile and maintain patients' medical records to document condition and treatment and to provide data for research or cost control and care improvement efforts.
- ❖ Consult classification manuals to locate information about disease processes.
- ❖ Enter data, such as demographic characteristics, history and extent of disease, diagnostic procedures, or treatment into computer.
- ❖ Identify, compile, abstract, and code patient data, using standard classification systems.

- ❖ Maintain or operate a variety of health record indexes or storage and retrieval systems to collect, classify, store, or analyze information.
- ❖ Post medical insurance billings.
- ❖ Process and prepare business or government forms.
- ❖ Process patient admission or discharge documents.
- ❖ Protect the security of medical records to ensure that confidentiality is maintained.
- ❖ Release information to persons or agencies according to regulations.
- ❖ Resolve or clarify codes or diagnoses with conflicting, missing, or unclear information by consulting with doctors or others or by participating in the coding team's regular meetings.
- ❖ Retrieve patient medical records for physicians, technicians, or other medical personnel.
- ❖ Review records for completeness, accuracy, and compliance with regulations.
- ❖ Scan patients' health records into electronic formats.
- ❖ Schedule medical appointments for patients.
- ❖ Transcribe medical reports.

Textbooks and references

- Accounting software's like Billing software; NDCMedisoft; QMSoftware Receivables Management
- Classification software such as 3M Encoder; American Medical Association CodeManager; Computerized indexing systems; DRG grouping software

- Medical software such as eClinicalWorks; EHR software EpicSystems MEDITECH software; Welford Chart Notes
- Encoder software, Microsoft Outlook, Coding data software, Microsoft word, Excel

Career Growth Opportunities:

Because of the rapid growth in the number of medical tests, corresponding treatments and procedures career opportunities will be increasingly grow as the patient services scrutinized by third party payers, regulators, courts, and consumers, Jobs of Medical Insurance and Coding Specialists is expected to grow much faster than the average for all other healthcare occupations. The employment growth and the new jobs are expected in Doctors offices, and corporate services due to increasing demand for multiple treatments and detailed records. Furthermore, Rapid growth also is expected in long term care (LTC) facilities, home healthcare & Home care services, mental healthcare & rehabilitation facilities, insurance companies, consulting firms, law offices and outpatient care centers including vision, dental care, and pain medicines & centers.

Class Schedule:

Each module of the program is an independent unit. However, the program is based on a cyclical schedule where, for example a new student may start on the program on the third

module, but after completing the last module, will circle back to the first module, to complete the first remaining modules.

Medical Billing & Coding Job Opportunities and Salary Ranges

The completers of the program may have the Followings Work Settings but not limited to:

- Law Offices, Insurance Filing, processing firms
- Dental Offices , Medical office
- Hospitals, Medical Transcriptionists
- Specialty Clinics
- Independent Transcriptionists.
- Billing Private and Third Party
- Diagnostic Coding
- Office Accounting
- Front Office Procedures
- Scheduling Surgeries
- Office Management
- Posting Fees and Charges/Payments
- HIPAA Occupational Outcomes
- Dental/Medical Billing Specialist
- Medical Records Specialist
- Medical/Dental Accounting
- Medical/Dental Insurance Specialist

The average starting salaries for the various titles job could vary in range depending on past work experience, continuing education and geographic location which can be find by referring to www.salary.com and http://www.bls.gov/.

Dental Assistant Program

Dental Assistant training in CTK healthcare & Career Institute is a fast-paced course designed to prepare its student for the dental health care. This program will train the students about the techniques of dental theory and terminology, four-handed assisting in chair side procedures, exposing and processing dental radiographs/x-rays, infection control standards, obtaining impressions of the oral cavity for the fabrication of study models and custom trays used for bleaching procedures. Furthermore, this program will be able teach students about the instruments and their specific uses, dental materials & preparation. Furthermore, it teaches for fabrication of provisional coverage (temporary crowns), background information on the dental profession including interpersonal skills, dental ethics and Practice Act laws, dental terminology, interactions with patient, and dental records management. The program will be offered as traditional in -person mode of delivery which includes didactic, hands-on lab skills,

internship and/or Extensive dental skills review. At the completion of this course, each student will have received training for a job as a dental assistant, and will take the Texas State Board of Dental Examiners exam for Registered Dental Assistants for license. Furthermore, at the end of the program, students will be able to receive Diploma in Dental Assistant Program.

Delivery Mode: Dental Assistant program will be delivered in Hybrid Mode. This program consists of 548 hours of classroom and Hands-on Skill training, and 80 Hours of Externship and/or Extensive dental skills review under the guidance of certified Dental professionals in Dental facilities or through approved Dental Assistant instructor in CTK Dental laboratory. The total contact hours for this program are 628 Hours.

Student Learning Outcomes: Upon completion of this course, Completers will be able to understand

1. Oral anatomy and dental terminology
2. X-ray theory and techniques including exposure methods, darkroom care, maintenance & x-ray safety)
3. To develop x-rays.
4. Different dental materials and their uses and care.
5. To pour impressions for stone models.
7. To utilize proper use of dental instruments and sterilization techniques.
8. To participate in chairside assisting with effective retraction and suctioning. .
10. To fabricate provisional crowns and custom trays used for whitening procedures.
11. Dental emergencies and appropriate dental procedures.
12. Proper telephone techniques and appointment book management.
13. To understand dental billing, insurance forms, and pre-treatment estimates.
14. To be able to work in many administrative and clerical positions.
15. The roles and perform duties of a professional dental assistant in dental office

Job Outlook

Bureau of labor Statics indicates that the median annual wage for dental assistants was $44,820 in May 2022, with the Employment of dental assistants is projected to grow 7 percent from 2022 to 2032, faster than the average for all occupations. About 55,100 openings for dental assistants are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire [Source: https://www.bls.gov/ooh/healthcare/dental-assistants.htm]

Textbook(s)

- Essentials of Dental Assisting (6th Ed. 2016). DS Robinson and DL Bird. ELSEVIER. St. Lous, USA

Vocational English as a Second Language [VESL]

This program is dedicated exclusively to instruction in English as a Second Language (ESL). It is intended for students who must enhance their English proficiency to effectively apply their existing vocational knowledge, training, or skills. It emphasizes developing essential English language skills across all curriculum levels, including listening, reading, writing, speaking (conversation), and grammar.

Courses are meticulously structured to build skills progressively, introducing and teaching English language elements in a logical sequence, starting with the basics and advancing to more complex aspects. The curriculum is designed to support students at the beginning, low intermediate, and high intermediate levels, ensuring that each stage of learning is addressed comprehensively.

The program employs an interactive and guided approach, integrating various instructional methods. These include lectures, laboratory exercises, class discussions, and group activities, all aimed at enhancing English language proficiency. This multifaceted approach ensures that students gain practical experience and develop their English language skills in a supportive and dynamic learning environment.

Objectives of the Program

1. To enhance English language proficiency for students with existing vocational or professional knowledge, training, and skills, enabling them to apply these competencies effectively in an English-speaking environment.
2. To progressively build English language skills across all curriculum levels, including speaking (conversation), listening, pronunciation, grammar, reading, writing, and vocabulary, from beginner through advanced stages.
3. To improve career prospects by overcoming English language barriers, allowing graduates to leverage their existing vocational or professional expertise more effectively.
4. To cultivate essential employment-seeking skills that will empower students to compete successfully in the job market, utilizing their pre-existing knowledge, training, and skills.

Textbook

Anthony, L. **Introducing English for Specific Purposes** (Routledge Introductions to English for Specific Purpose. 2018)

Surgical and Sterile Processing Technician Program

The Surgical and Sterile Processing Technician Program is a comprehensive, career-focused training program designed to equip students with the theoretical knowledge and hands-on skills required to excel in sterile processing and surgical technology roles. This program prepares students to work in hospitals, surgical centers, and other healthcare facilities by providing a dual

foundation in reprocessing surgical instruments and direct support in the operating room.

The curriculum begins with core concepts in medical terminology, surgical anatomy and physiology, microbiology, and infection control, laying the groundwork for safe and effective practice in sterile environments. Students' progress through detailed instruction in instrument decontamination, disinfection, sterilization techniques, packaging, storage, and inventory management, strongly emphasizing compliance with industry regulations and infection prevention standards.

In the surgical technology component, students develop skills in preoperative case preparation, intraoperative assistance, and postoperative procedures, while also learning to handle surgical instruments, maintain sterile fields, and support patient safety. Topics include general, specialty, and minimally invasive surgical procedures, anesthesia fundamentals, perioperative pharmacology, and safe patient positioning and transport. The program also addresses sensitive issues such as death and dying, cultural awareness, and ethical conduct in clinical settings.

Through classroom learning, simulated labs, and clinical exposure, students will gain real-world experience in setting up surgical trays, identifying and managing surgical instruments, operating autoclaves and sterilizers, and supporting surgical teams in high-pressure environments. Upon completion, graduates will be well-prepared to pursue certification and employment as Sterile Processing Technicians, Surgical Technologists, or Operating Room Technicians, contributing directly to patient care and surgical excellence.

Upon successful completion of the program, students will be able to:

1. Demonstrate a comprehensive understanding of medical terminology, surgical anatomy, physiology, microbiology, and infection control as they apply to sterile processing and surgical environments.
2. Safely handle, decontaminate, disinfect, and sterilize surgical instruments and medical devices using both manual and mechanical methods, in compliance with regulatory and infection prevention standards.
3. Identify, inspect, and maintain surgical instruments across various specialties, including robotic, endoscopic, and heat-sensitive devices.
4. Assemble and package surgical trays and individual instruments using appropriate materials and indicators, ensuring sterility through accurate documentation and quality control procedures.
5. Operate high- and low-temperature sterilization equipment, including steam autoclaves, hydrogen peroxide gas plasma systems, and peracetic acid processors.
6. Maintain sterile storage areas and manage instrument inventory, applying best practices in labeling, transport, tracking, and restocking.
7. Support the surgical team during all perioperative phases, including case setup, intraoperative assistance, and postoperative breakdown and turnover procedures.

8. Apply sterile techniques in the surgical suite, including gowning, gloving, draping, and maintaining the integrity of the sterile field.
9. Communicate effectively and professionally with surgeons, anesthesiologists, nurses, and sterile processing personnel to promote teamwork and patient safety.
10. Demonstrate proficiency in identifying surgical instruments and setting up the back table and Mayo stand for a variety of surgical procedures.
11. Understand and assist with anesthesia procedures and perioperative pharmacology, including safe handling of medications and patient monitoring responsibilities.
12. Safely move, position, and transfer patients before, during, and after surgery, with attention to body mechanics, dignity, and safety.
13. Respond appropriately to emergency and trauma situations in surgical settings, demonstrating adaptability, focus, and technical competence under pressure.
14. Apply ethical principles and cultural sensitivity in clinical settings, particularly in challenging scenarios involving end-of-life care and patient diversity.
15. Integrate theoretical knowledge and hands-on skills to function as a confident, competent member of the surgical and sterile processing teams, prepared to sit for professional certification exams and enter the healthcare workforce.

Textbooks

1. Sterile processing technical manual by healthcare sterile processing association, along with theworkbook.
2. surgical technology principals and practice by Joanna Kotcher Fuller, 8th edition, along with theworkbook.
3. Differentiating Surgical Instruments by Collen J Rutherford

Associate of Applied Science in Information Technology Cyber Security [AAS-IT CYBER]

Course Description

The Associate of Applied Science (AAS) in Information Technology with a concentration in Cyber Security is designed to prepare students for entry-level positions in the fast-growing field of cyber defense and IT security. The program combines foundational coursework in networking, operating systems, and IT support with specialized training in cybersecurity principles, risk management, ethical hacking, and digital forensics. Students will develop the technical skills and critical thinking needed to protect organizations against evolving cyber threats. This hands-on program aligns with industry certifications and provides a pathway to

further education or immediate employment in roles such as security analyst, network technician, or IT support specialist.

Program Objectives:

Develop Core IT Competencies:
Equip students with a solid foundation in information technology, including knowledge of hardware, software, networking, and operating systems.

Understand Cybersecurity Principles:
Introduce fundamental concepts of cybersecurity such as threat analysis, risk assessment, access control, and security policies.

Apply Security Tools and Techniques:
Provide hands-on experience with tools used for ethical hacking, intrusion detection, firewalls, and malware analysis to protect IT systems.

Promote Ethical and Legal Awareness:
Ensure students understand the ethical responsibilities and legal standards related to cybersecurity and data privacy.

Prepare for Industry Certifications:
Align coursework with recognized certifications such as CompTIA Security+, Network+, and Cisco CCNA Security to improve job readiness.

Enhance Problem-Solving and Critical Thinking:
Train students to analyze and respond to real-world cyber threats through labs, simulations, and case studies.

Text books

Introduction to Cybersecurity (ITCS-201): *"Cybersecurity Essentials" by Charles J. Brooks, Christopher Grow, Philip Craig, and Donald Short,* ***ISBN:*** *978-1119362395*
Networking Security Fundamentals (ITCS- 202): *"Network Security, Firewalls, and VPNs" (2nd Edition) by J. Michael Stewart*
Cybersecurity and Digital Ethics (ITCS-301): ***"Cybersecurity Ethics: An Introduction"*** *by Mary Manjikian,* ***978-1032164977***
Introduction to Digital Forensics (ITCS-302): ***"Guide to Computer Forensics and Investigations" (6th Edition)*** *by Bill Nelson, Amelia Phillips, and Christopher Steuart ISBN13:* ***978-1593272906***
Firewalls and Network Security Design (ITCS- 401): *Network Security Essentials: Applications and Standards (6th Edition)* by William Stallings
Information Security: Cyber Security (ITCS-402): *"Principles of Information Security" by Michael E. Whitman and Herbert J. Mattord,* ***ISBN: 978-1-337-10206***
Ethical Hacking and Penetration Testing (ITCS-501): *"The Hacker Playbook 3: Practical Guide to Penetration Testing" by Peter Kim, ISBN13:* ***9781980901754***
Incident Response and Malware Analysis (ITCS- 502): *Practical Malware Analysis: The Hands-On Guide to Dissecting Malicious Software by Michael Sikorski and Andrew Honig (ISBN13:* ***978-1593272906***
Cloud and Web Security (ITCS 503): *Cloud Security and Privacy: An Enterprise Perspective on Risks and Compliance by Tim Mather, Subra Kumaraswamy, and Shahed Latif.*
Cybersecurity Threat Management (ITCS-601): *Cybersecurity Threats, Malware Trends,*

and Strategies" by Tim Rains,
Introduction to Cryptography (ITCS-602): *"Cryptography and Network Security: Principles and Practice" by William Stallings,* ***ISBN: 978-0134444284***
IT Project Management (ITCS- 701): *"Project Management for Information Security" by Susan Snedaker.*
Cybersecurity Capstone (ITCS- 702): ***"The Cybersecurity Handbook: A Practical Guide to the Security of the Networked World"*** *by Sean O'Reilly and Roberta Bragg,*

Associate in Applied Science in Healthcare Information Technology (AASHIT)

The revised degree program emphasizes lectures, lab activities, and tutorials equally. The lecture hours and tutorial/lab activities are nearly balanced, ensuring the increased clock hours do not exceed 1490. Similarly, the Quarter credit hours are maintained very close to the limit of 108 credit hrs. It focuses on designing healthcare related technological information and computing systems to deliver effective solutions for business challenges using research data and communication support. The curriculum includes 24 quarter credits for General Education and 84 credits for Core Pharmacy, medical insurance, billing, and information technology courses, as outlined in Table #2. Table #2 also lists the names of the courses offered each semester, spanning six quarters required to earn the degree. The degree program supports the workforce by offering certificates of completion alongside the AAS degree: Electronic Medical Record (EMR), Pharmacy Technician, Medical Insurance & Billing Specialist (MIS), Health Informatics & Healthcare Data Analyst, Healthcare Management Certifications. After the completion of program, students be able to successfully capable to pass the following Industry Level Certification .

- PTCB,
- CBCS
- ComTIA +

Health, Nutrition & Wellness, and Weight Loss Seminar

This seminar provides the tools to make confidence for general healthy living plans for the student their friends and family. Furthermore, it motivates for better understanding of the relationship between lifestyle, nutrition, and health. Above all, it will be able to support to make more informed decisions about weight watch and loss. This survey aims the following takeaways –

- connection between a healthy lifestyle verses disease and chronic conditions.
- Apply collaborative cycle to motivate to adopt sustain healthy behavioral patterns.
- Understand the evidence-based meaning of healthy eating patterns.
- Know the pillars of lifestyle medicine and their dependencies on one another to achieve sustained wellness.
- Understand to Create a plan for behavioral changes and to adopt and sustain healthy practices through all life stages.

Admission Requirement: 18 years of old

Materials: Handout of the learning materials will be provided prior to the start of the seminar

Sterile Processing Technician Program

Program description

Sterile processing technicians perform and participate in decontamination, cleaning, assembling, packaging, scanning, sterilization, storage, and distribution of reusable surgical instrumentation and equipment. They also assist the surgeon in donning PPE as well as transport the patient to the OR, position and drape the patient for the specific procedure, prepare the skin for the procedure, and assist the surgeon as needed during the procedure. By the end of the program, students will be able to do the following:

1. Identify different packaging and assembly procedures for medical devices
2. Identify procedures for transporting sterile equipment
3. Describe immediate-use steam sterilization and when it's used within the operative environment
4. Describe the differences between low- and high-temperature sterilization
5. Explain how to load packaged medical devices into sterilizers
6. Identify various components of the steam sterilizer, their functions, and sterilizer cycle phases
7. Describe physical, mechanical, chemical, and biological monitoring procedures
8. Identify the various inventory replenishment systems and how they're used in sterile processing
9. Discuss how ancillary services support sterile processing
10. Define the distribution process
11. Discuss the receiving and requisitioning of medical supplies and equipment
12. Identify reasons for record-keeping in the sterile processing department
13. Describe quality assurance principles as they relate to sterilization monitoring and other processes in sterile processing
14. Identify consumable items used in sterile processing
15. Discuss how ancillary services and regulatory agencies support sterile processing
16. Define the distribution process
17. List the importance of preventative maintenance in sterile processing
18. Discuss systems used to track medical equipment
19. Discuss receiving and requisitioning of medical supplies and equipment
20. Identify the information systems that support sterile processing
21. Explain OSHA compliance standards and how they contribute to safety in the workplace
22. Identify safety guidelines, permissible exposure limits, and electrical safety concerns within the sterile processing department
23. Identify guidelines for handling and disposing of hazardous materials
24. Differentiate internal and external workplace hazards

Text Books

- Sterile Processing University LLC, Eigth Edition, 2025, The Basics of Sterile Processing Text Book; By Nancy Chobin, RN, AAS, ACSP, CSPM, CFER; Sterile Processing University LLC, Lebanon, New Jersey, USA
- Sterile Processing University LLC, Eigth Edition, 2025, The Basics of Sterile Processing WorkBook; By Nancy Chobin, RN, AAS, ACSP, CSPM, CFER; Sterile Processing University LLC, Lebanon, New Jersey, USA
- The Human Body in The Health Science, 7th Edition; ISBN: 9780323402101,Author: Kevin Patton & Gary Thibodeau, Elsevier

Instructional Methods

Lecture INET, Virtual meeting twice a week- Delivery method virtual lecture with hands on lab demonstration, Students learning varies from cooperative learning to self-paced online assignments. Clinicals are in person in sterile or surgical center facilities scheduled once a week.
Students to Instructor Ratio: Lecture 18:1; Lab 6:1

Course Module Descriptions

PTT101: Introduction to Physical Therapy, Rehabilitation Support, Communication, and Medical Terminology

This module introduces students to the physical therapy profession and the role of the Physical Therapy Technician/Aide in rehabilitation and patient support settings. Students will learn about the purpose of physical therapy, career opportunities, the rehabilitation team, professional expectations, scope of practice, task limitations, workplace behavior, and effective communication with patients and healthcare team members. The module also introduces medical terminology and the medical record, including prefixes, suffixes, root words, abbreviations, directional terms, body-system terminology, movement terms, treatment terms, and documentation vocabulary used in physical therapy settings. Students will also receive an overview of Certification expectations. **Prerequisite:** None. **[Lec/Lab/Ext/Total: 68/12/00/80]**

PTT102: Anatomy, Physiology, Musculoskeletal Systems, and Common Medical Conditions

This module provides foundational instruction in the structure and function of the human body as it relates to physical therapy and rehabilitation care. Students will study basic anatomy and physiology, body organization, anatomical position, body planes, body regions, homeostasis, and the relationship between body systems and physical function. The module emphasizes

applied anatomy and physiology of the musculoskeletal system, including the human skeleton, major muscles, joints, functional movement, range of motion, and movement terminology. Students will also study common medical disorders treated through physical therapy, including musculoskeletal, neurological, cardiopulmonary, and functional conditions, as well as inflammation, healing, pressure injuries, abnormal patient responses, and reporting responsibilities. **Prerequisite:** PTT101. **[Lec/Lab/Ext/Total: 104/16/00/120]**

PTT103: Administrative Duties, OSHA, Infection Control, Safety, and Patient Care Support

This module introduces students to the administrative, safety, infection control, and patient care support responsibilities of the Physical Therapy Technician/Aide. Students will learn about clinic flow, scheduling, patient intake, customer service, medical records, charting, SOAP note awareness, electronic health records, billing and insurance processing awareness, and reporting patient observations. The module also covers safety in the working environment, OSHA-related safety expectations, infection control principles, standard and universal precautions, hand hygiene, PPE use, cleaning and disinfecting treatment areas and equipment, biohazard safety, environmental safety, fall prevention, emergency procedures, first-aid awareness, CPR awareness, and basic patient preparation and care support duties. **Prerequisite:** PTT102. **[Lec/Lab/Ext/Total: 62/18/00/80]**

PTT104: Patient Preparation, Positioning, Transfers, Body Mechanics, and Wheelchair Skills

This module focuses on hands-on patient preparation and safe patient-assistance skills used in physical therapy and rehabilitation settings. Students will learn how to prepare treatment areas, assist with patient preparation, maintain patient privacy and dignity, support patient comfort and safety, and assist with turning, positioning, and draping. The module also teaches proper body mechanics, safe lifting, bed mobility, transfer principles, sit-to-stand transfers, bed-to-wheelchair transfers, wheelchair parts and safety, wheelchair positioning, wheelchair mobility basics, fall-risk awareness, and fall-prevention strategies. Emphasis is placed on safe practice, injury prevention, and performing duties under appropriate supervision. **Prerequisite:** PTT103. **[Lec/Lab/Ext/Total: 54/26/00/80]**

PTT105: Ambulation, Gait Training, Assistive Devices, Therapeutic Exercise, and

Mobility Support

This module introduces students to ambulation, gait training, assistive devices, therapeutic exercise, and mobility support activities used in physical therapy settings. Students will learn normal and abnormal gait, gait cycle basics, balance, coordination, ambulation-related activities, use of gait belts, canes, crutches, walkers, parallel bars, weight-bearing terminology, stair safety, turning, and mobility safety. The module also covers therapeutic exercise principles, active range of motion, passive range of motion, active-assistive range of motion, strengthening, stretching, flexibility, coordination activities, endurance training, exercise safety, contraindication awareness, patient monitoring, and documentation of completed activities within the Physical Therapy Technician/Aide role. **Prerequisite:** PTT104. **[Lec/Lab/Ext/Total: 54/26/00/80]**

PTT106: Therapeutic Modalities, Physical Agents, Specialized Procedures, Law, Ethics, HIPAA, and Professional Conduct

This module introduces students to selected therapeutic modalities, physical therapy agents, specialized clinical procedures, and the legal and ethical responsibilities of the Physical Therapy Technician/Aide. Students will learn the purpose and safety considerations of heat therapy, cold therapy, cryotherapy, superficial heat, deep-heat awareness, modality setup and cleanup support, equipment safety, skin inspection, contraindication and precaution awareness, patient response monitoring, role boundaries, and reporting adverse reactions. The module also covers ethical and legal issues, HIPAA, confidentiality, patient rights, informed consent awareness, cultural sensitivity, diversity, professional boundaries, delegation, supervision, scope of practice, ethical decision-making, and professional conduct in physical therapy and rehabilitation settings. **Prerequisite:** PTT105. **[Lec/Lab/Ext/Total: 63/17/00/80]**

PTT107: Career Preparation, Lab Review, Procedure Evaluation, and Skills Checkoff

This module provides final career preparation, certification review, lab review, procedure evaluation, skills checkoff, and program completion activities. Students will prepare for entry-level employment through resume preparation, cover letter development, interview skills, job search strategies, employer expectations, workplace professionalism, and certification next-step planning. Students will review Certification exam domains, including patient care and administrative duties, therapeutic modalities, medical terminology, anatomy and physiology, medical law and ethics, patient preparation and positioning, and OSHA/infection control. The module includes mock certification-style questions, practice evaluation testing, procedure

evaluations, lab review stations, skills remediation, final written examination, final practical skills evaluation, and optional externship or work-based observation when available and approved. **Prerequisite:** PTT106. **[Lec/Lab/Ext/Total: 110/10/00/120]**

Physical Therapy Aide (PTA) Seminar

This seminar is the survey of the concepts and skills required to support the work of Physical Therapist aims to recover individuals of all ages from injury and pain. The course covers the fundamental concepts about the human body, body mechanics, Medical disorders & Safety Issues, CPR & First Aid, Modalities of physical therapy and patient preparation & Transporting Techniques. Furthermore, this seminar course is an introductory course aiming to help students gain significant knowledge necessary to understand and may apply in Physical Therapist and related vocational program of this subject, even though it doesn't fulfill the legal requirements of particular state licenses or certifications, which may require additional training or internship. Recipients of this seminar may be able to work in a variety of healthcare settings such as physical therapy clinics, outpatient rehabilitation centers, physician's offices, home health agencies, Home cares, Long term cares and hospitals.

Admission Requirement: 18 years of old

Text Books: Handout of the learning materials will be provided prior to the start of the seminar

Materials: Hand out of course materials will be provided

Physical Therapy Technician (PTT)

Program Description

Physical Therapy Technician/Aide program is sixteen-week hybrid program that includes in-person lab and remainder of the course delivered in online mode. Major goal of this program is to prepare students for Physical Therapy Technician Certification exam by covering major knowledge areas such as anatomy and physiology, medical terminology, patient care and administrative duties, therapeutic modalities, OSHA and infection control, patient preparation and positioning, and medical law and ethics. Upon completion, students will be prepared to assist licensed physical therapy professionals under appropriate supervision in clinics, hospitals, rehabilitation centers, long-term care facilities, sports medicine settings, and other healthcare environments. The Physical Therapy Technician program is designed to be completed in Sixteen (16) weeks. The program includes classroom theory instruction and supervised laboratory skills

training for a total of 640 contact hours. The final portion of the program may include lab review, skills evaluation, certification review, and/or optional externship or work-based observation, depending on site availability and institutional approval. Consistent with instructor guidance and course objectives, students may independently use appropriate personal gym-based activities as examples to support learning of tissue-specific exercise concepts, techniques, and applications. Students may choose to pursue a certification exam after completing the program; however, certification testing is optional and is not required for successful completion of the Physical Therapy Technician program.

Program Objective

The objective of the Physical Therapy Technician program is to prepare students for the foundational knowledge, hands-on skills, professional behaviors, and certification readiness needed for entry-level employment in physical therapy, rehabilitation, and related healthcare and wellness settings. The program is designed to train students in the role and responsibilities of the Physical Therapy Technician/Aide, including patient care support, infection control, patient preparation, positioning, transfers, ambulation, therapeutic exercise support, therapeutic modality assistance, documentation, communication, legal and ethical responsibilities, and workplace professionalism.

Computerized system validation (CSV) Seminar

Computerized system validation (CSV) (Computerized system validation in European countries, and usually referred to as "Computer Systems Validation") is the process of testing/validating/qualifying a regulated (e.g., US FDA 21 CFR Part 11) computerized system to ensure that it does exactly what it is designed to do in a consistent and reproducible manner that is as safe, secure and reliable as paper-based records. This is widely used in the Pharmaceutical, Life Sciences, Medical Device and Biotech industries and is a cousin of Software Testing but with a more formal and documented approach. The validation process begins with validation planning, system requirements definition, testing and verification activities, and validation reporting. The system lifecycle then enters the operational phase and continues until system retirement and retention of system data based on regulatory rules.

Similarly, The Rules Governing Medicinal Products in the European Union, Volume 4, Annex 11: Computerized Systems applies to all forms of computerized systems used as part of a GMP regulated activities and defines Computer System Validation Elements.

Objectives:

1. To review the hands on experience for a real system throughout the process per current industry standard (cGMP).
2. To provide real experience with the equipment validation process

Admission Requirements: Bachelor’s degree in any Major

Course Materials:

1. Templets and hand outs will be provided in the class
2. GAMP 5/ Risk Based Approach to Compliant GxP Computerized Systems

General Understanding on Nursing Education System & Technology (GUEST) Seminar

This seminar is the survey of the overview of various disciplines of Nursing career in United States. This includes the scope, career growth and future of the nursing trainings and degree programs including the technological advances it may have in the future. Furthermore, it includes the job growth rate, pay scale of various titles of nursing career, and job security for now and in future. It includes the business perspective that one can jump in once graduated in various level of nursing education trainings. Moreover, it also includes the type of entrance exams, their scope and requirements to enroll in most of the programs of interest in allied health program such as Nursing, Dental, Pharmacy and etc. And, at the end one practice entrance Exam of their discipline of interest will be administered.

Admission Requirement: High School Diploma or GED

Materials: Hand out of Entrance Exam Preparation Materials

Text Books: Master the Nursing School & Allied Health Exams (Peterson's Master the Nursing School & Allied Health Programs Entrances Exams) 19th Edition

ISBN: 978-0768937015

Computer Basics Seminar

This seminar is designed to teach students about the basic information about the computer application which includes Microsoft office and Basic operating system. Furthermore, it introduces the use of computer to create and customize word document, excel sheet and PowerPoint slides. It also teaches the basic computer operating system and to implement for professional computers and careers.

Learning Materials;

- Microsoft Office 2021 Professional Plus (PC)
- SKU: 0889842856354

EKG/ECG Technician Training Seminar

EKG or ECG (Electrogardiograph) technician training seminar is a course designed to review the scope and role of EKG technicians including the skills and abilities essential to the provision of basic care to patients and residents related to heart health issues. Upon completion of this seminar, students will be able to recall communication and interaction skills with patients, assist patients in attaining, and maintaining maximum functional independence, while observing patient rights. They will review how to assess heart rhythm, strength, rate and

timing. Students will also revise the instructions in EKG/ECG unit operation and troubleshooting, use and understanding of EKG/ECG grid paper, and recognizing normal and abnormal heart movements. Students will receive CTK Healthcare & Career's certificate of completion at the end of the training.

- EKG Textbook: Theory and Practical Fundamentals Electrocardiography (Series I). Opret Education.
- The book is available for purchase from CTK Healthcare and Career Institute, through local bookstores or On-Line retailers such as alibris.com, Amazon.com, Barnes&Noble.com and elsevier.com. Please contact the school director for more information.

EMR Technician Training Seminar

EMR (Electronic Medical Record) technician training seminar is a course designed to review the scope and role of EMR technicians including the skills and abilities essential to the provision of recording patients' data. Upon completion of this seminar, students will be able to recall classification systems to code and categorize data for insurance reimbursement as well as tracking the medical and treatment history of patients maintaining maximum functional independence, while observing patient rights. Students will receive CTK Healthcare & Career's certificate of completion at the end of the training.

The textbook recommended for this course:

- Today's Medical Assistant – Text and Study Guide Package: Clinical and Administrative Procedures (1st Ed.) by Kathy Bonewit-West, BS Med, Sue Hunt MA RN CMA (AAMA) and Edith Applegate MS (Dec 15, 2008)

Phlebotomy Technician Training Seminar

This seminar is a course designed to review the scope and role of phlebotomy technicians including the skills and abilities essential to the provision of verifying medical records, conduct interview with patients, check vital signs, obtain blood samples, and prepare the samples for lab analysis. Upon completion of this seminar, students will review the techniques to draw bloods through venipuncture for lab analysis maintaining maximum functional independence, while observing patient rights. Students will receive CTK Healthcare & Career's certificate of completion at the end of the training.

The textbook recommended for this course:

- Phlebotomy Technician Textbook: Theory and Practical Fundamentals (Series I). Opret Education

Fundamentals of A & P and Medical Terminology Training Seminar

This seminar is a course designed to review basic knowledge of human anatomy and physiology. The students will recall the internal and external human body structure as well as the process how human organ systems perform the functions. In addition, students will be able

to review the medical terminology by using prefixes, suffixes, word roots and combining forms to construct anatomical, physiological, or medical terms. Students will receive CTK Healthcare & Career's certificate of completion at the end of the training.

The textbook recommended for this course:

- Today's Medical Assistant – Text and Study Guide Package: Clinical and Administrative Procedures (1st Ed.) by Kathy Bonewit-West, BS Med, Sue Hunt MA RN CMA (AAMA) and Edith Applegate MS (Dec 15, 2008)

Cardiopulmonary Resuscitation Certification (CPR)

This seminar is designed as per the approved guidelines from American Heart Association(AHA) life-saving techniques, to train healthcare workers and first responders that includes. It focuses on techniques rescuers need to know to perform effective CPR on adults, children, and infants by one person or two person rescuers. This course also aims to teach how to respond to chocking emergencies. After successful completion of CPR seminar, students will be able to 1) describe importance of CPR and perform high-quality CPR for an adult, a child and an infant, 2) to apply the concepts of basic life support (BLS) and describe steps of the chain of survival, 3) recognize the signs needing CPR 4) learn to use of automated external defibrillator (AED), and 5) apply the skills required for Advanced Cardiovascular Life Support (ACLS) & Pediatric Advanced Life Support (PALS)

The textbook recommended for this course:

- Microsoft Office 2021 Professional Plus (PC)
- SKU: 0889842856354

RN/LVN Nursing Refresher Program

An RN/LVN Nursing Refresher Program is aimed at helping nurses who have been out of practice for a while to refresh their knowledge and skills, ensuring they can safely re-enter clinical practice. The program focuses on updating them on current nursing standards, new technologies, procedures, and legal requirements, while also filling any gaps in their knowledge due to the fast-paced changes in healthcare. By meeting the following objectives, a Nursing Refresher Program helps nurses confidently return to practice and contribute effectively to the healthcare workforce.

- Provide hands-on practice to help nurses regain proficiency in essential nursing skills.
- Ensure nurses are able to perform clinical tasks with confidence and accuracy upon returning to the workforce.
- Educate nurses on the latest standards of care, protocols, and evidence-based practices in nursing.
- Familiarize nurses with the latest advancements in healthcare technologies and treatments.
- Identify and address any gaps in knowledge due to the nurse's time away from clinical practice.
- Ensure nurses are up-to-date with current medical trends, new procedures, and emerging health issues.
- Provide an understanding of the legal and ethical responsibilities of nursing practice.
- Update nurses on changes to healthcare laws, patient rights, and regulatory requirements.
- Reinforce the importance of patient safety, infection control, and quality care delivery.
- Ensure that nurses are aware of current protocols for emergency situations, medication administration, and patient management.
- Help returning nurses overcome any anxieties or insecurities about re-entering clinical practice.

- Increase their self-assurance in their ability to perform nursing tasks competently and interact with patients and healthcare teams
- Provide the necessary education and training to help nurses transition smoothly back into the workforce.
- Ensure that nurses meet any continuing education or licensure requirements for re-entering clinical practice.
- Encourage career growth by introducing nurses to opportunities in various specialties or leadership roles.
- Foster a sense of professional pride and competence through updated training and development opportunities.
- Offer opportunities for nurses to connect with peers, mentors, and professionals in the field.
- Encourage collaboration and teamwork skills, which are essential for effective patient care.

Textbooks

- Nursing: A concept-based approach to learning. Bauer JL and Pohlman JJ. Peason Education, 2022

IV Therapy Certification Seminar

This IV course seminar is for RNs, LVNs, and MAs working under the direct supervision of an RN or MD. This seminar includes didactic portion and in person lab portion. The didactic portion of this course includes from Anatomy & Physiology. IV matters including Infection, complications, legal and ethical considerations and lab performance. The Anatomy Physiology includes all about the matters of Viens, the Infection Control and Safety includes Local Complications and Systemic Complications while The legal and ethical considerations of IV therapy including Regulatory Agencies and Governing Bodies. It further discuses Protective Measures for Guarding against Malpractice Lawsuits. The main focus of the course are listed below. This course has four modules. Module 1 through 3 has an online component and Module 4 is in-person skills training and testing. The online portion of the course is accessed from "LMS" on our home page and must be completed prior to the online module of this course. The online course is not presented live and involves reading assignments of the presented content. Student need to take and pass the online theory Exam prior to take lab portion . The theory written Exam has 100 multiple-choice questions and you must pass it with an 80% or greater a**nd** have three attempts to pass the online written exam successfully. Each attempt will have different questions. The written exam content is contained in the online course. The questions are all based on the course lessons/content. Those who complete all the modules usually pass the written exam.
The practical testing of Module 4 is performed in campus laboratory. The course allows for short demonstrations and testing during your course. You are tested based on the course competency testing checklist (provided at your course and available in the LMS upon course registration). Mannequins are used for practice and testing. Furthermore, in the lab module all venipuncture attempts are performed on mannequins. The insurance for this course does not permit any venipuncture on a live person. The liability could result carries massive risk, and is too massive for any person or organization to endure.
NOTE; THIS IS NOT AN INFUSION THERAPIST COURSE.
Objective: This introductory IV therapy course prepares the student to insert a peripheral short

catheter IV in the upper extremities. Once the course is completed, the student will be able to ***safely insert a peripheral IV. Furthermore, the student can maintain intravenous therapy in an acute*** Surgical, Medical, ER, Physician's Office, Nursing Home, and Home Health setting**.** Once this course is completed successfully, the student receives a certificate of completion and a competency check-off on peripheral IV skills, separately.

Basic Math Seminar

Course Description:
This Nursing Math Workshop is designed as a foundational course for prospective LVN (Licensed Vocational Nurse) students to strengthen their mathematical skills and ensure proficiency in essential calculations required for nursing practice. The course covers fundamental mathematical operations, conversions between different numerical forms, and practical applications in clinical settings. Through a combination of lectures, hands-on exercises, and practical scenarios, students will develop the confidence and competence to accurately perform drug dosage calculations, IV flow rate determinations, and other critical measurements. By the end of the workshop, participants will be well-prepared to handle the mathematical demands of the LVN program and provide safe, effective patient care.

Learning Outcomes:

- Master basic arithmetic operations and their applications in nursing.
- Confidently convert between fractions, decimals, percentages, and ratios.
- Apply mathematical principles to real-world clinical situations.
- Accurately perform medication dosage calculations and IV flow rate adjustments.
- Demonstrate proficiency in using metric, apothecary, and household measurement systems.

Objectives:

1. **Understand Basic Mathematical Operations**: Perform addition, subtraction, multiplication, and division with fractions, decimals, and percentages.
2. **Convert Between Different Number Forms**: Convert between fractions, decimals, percentages, and ratios.
3. **Apply Math in Clinical Settings**: Use mathematical skills to calculate drug dosages, IV flow rates, and other clinical measurements.
4. **Interpret and Solve Proportions**: Solve problems involving proportions, especially in medication administration.

Use Metric and Household Measurements: Accurately convert and use metric, apothecary, and household measurement systems

FINANCIAL INFORMATION

Cost of the Programs

The cost of each program is listed below.

1. **Pharmacy Technician Program**

Registration -$10
Tuition - $8799
License Exams - $300
Books -$400
Externship Supply- $90
Total Cost: $9,599

2. **Patient Care Technician Program**
   Registration -$10
   Tuition -$7900
   Licenses Exams -$500
   Books/Supplies- $500
   Externship Supply- $89
   Total Cost -$8,999

3. **Nurse Aide Program**
   Registration -$50
   Tuition - $799
   Administration- $150
   Total cost = $999; [Books & Exam Fee is not included]

4. **Medication Aide Program**
   Registration -$50
   Tuition - $899
   Administration- $150
   Total Cost = $1099 [Books & Exam Fee is not included]

5. **Medical Assisting**
   Registration -$25
   Tuition - $10825
   Books -$1250
   Credentialing, Supplies and Misc.- $400
   Total Cost: $12,500

6. **Structured Query language, Business Intelligent Developer & Java Analyst**
   Registration -$25
   Tuition -$6895
   Licenses Exams -$500
   Books/Supplies- $400
   Externship Supply- $179
   Total Cost -$7,999

7. **Licensure Vocational Nursing (LVN)**

Registration -$100
Tuition -$10425
Books/Supplies- $1100
Other cost $ 3850
Total Cost -$25,900

8. **Medical Insurance Billing & Coding Specialist [MIS]**
   Registration -$25
   Tuition - $10325
   Books -$1250
   Credentialing, Supplies and Misc.- $400
   Total Cost: $12,000

9. **Dental Assistant**
   Registration -$100
   Tuition - $6195
   Supplies - $400
   Books and exam fee -$205
   Total Cost: $ 6,900

10. **Vocational English as a Second Language [VESL]**
    Registration -$100
    Tuition - $4340
    Supplies - $100
    Books and exam fee -$450
    Total Cost: $ 6,900

11. Surgical and sterile Processing Technician Program
    Registration -$100
    Tuition - $15,100
    Supplies - $4,600
    Books and exam fee -$1,700
    Total Cost: $ 21,500
12. Associate of Applied Science in Information Technology Cyber Security
    [AAS-IT CYBER]
    Registration- $50
    Tuition-$18,500
    Books and Certifications-$3000
    Total: $24,000

13. Associate in Applied Science in Healthcare Information Technology (HIT)
    Registration- $100
    Tuition-$20,900
    Books and Certifications-$1800
    Others: $1700

Total: $22,050

14. Sterile Processing Technician
    Registration -$100
    Tuition - $12,100
    Supplies - $4,600
    Books and exam fee -$2,100
    Total Cost: $ 18,900
15. Physical Therapy Technician
    Registration -$100
    Tuition - $3,900
    Supplies - $2,100
    Books and exam fee -$890
    Total Cost: $ 6,990

16. Continuing Education Seminar for Certified Nurse Assistant (CNA-Ce) - $99
17. Medication Aide Seminar for Continue Education - $99
18. Home Health Aide Seminar (HHA-Seminar) - $599
19. EKG/ECG Technician Training Seminar - $1099
20. EMR Technician Training Seminar - $1599
21. Phlebotomy Technician Training Seminar - $1099
22. Fundamentals of A & P and Medical Terminology Training Seminar - $1099
23. Computer Basics - $1999
24. Computer Program Refresher - $1999
25. Health, Nutrition & Wellness, and Weight Loss - $299
26. Physical Therapy Aide (PTA) – $599
27. Computerized System Validation (CSV) - $1999
28. General Understanding of Nursing Education System & Technology [GUEST] - $ 199
29. IV Therapy Certification Seminar - $ 634
30. Basic Math Seminar - $599
31. RN/LVN Nursing Refresher Program - $2000

Awarding of Aid

CTK encourages students to utilize Federal Student Aid to assist them with funding for programs eligible for Title IV Aid. CTK has an Admission/ Financial Administrator on staff to assist any student who chooses to complete the admission application and FAFSA application on site. Students may choose to complete the process at home. Counselors are available at the School for any clarification or question. Once the student completes the FAFSA application with the school code, the Institute receives the student information and starts working with his/her ISIR to determine the financial eligibility.

The general rule in packaging the financial aid is that the student's total financial aid

must not exceed the student's financial need (Need = Cost of Attendance (both direct and indirect costs) minus the Expected Family Contribution) the need will be filled with various financial aid programs. A Pell Grant is considered the first source of aid to the student and packaging begins with Pell eligibility.

In identifying the payment periods for each program, the Institute ensures that students meet their clock hour, weeks of instruction, attendance and grade point average (GPA) requirements in order to be eligible for the next Title IV, HEA funding disbursement. Each student will be evaluated at the end of each payment period to determine eligibility.

The following is an example of the minimum number of hours and weeks that a student must complete at the end of each payment period to be considered eligible to receive the next Title IV, HEA Aid payments.

Financial Aid Students must attend a minimum of 67% of the cumulative scheduled hours to maintain SAP and complete the course within the maximum allowed period. The attendance percentage is determined by dividing the total hours by the total number of hours scheduled. Students are expected to attend classes as per their enrollment agreement. Students are responsible to clock in and out appropriately to document their hours. Instructors take class attendance and a student must make sure his/her attendance is recorded correctly.

To remain in good academic standing, a student must maintain a least a 70% average (cumulative grade C) and complete the course in the designated time frame. Students who fall below a 70% average may be placed on Academic Probation as well as Title IV, HEA financial aid warning and /or probations if granted.

Return of Title IV Funds

As per the United States Department of Education Financial aid administration, financial aid is for educational purposes only. Therefore, at CTK, when a student withdraws before completing his/her program, a portion of the funds received by a student may have to be returned. The financial aid office will calculate the Title IV, HEA Federal fund and returns according to the following policies.

In our institution, the title IV, HEA policy applies to students' who withdraw officially from the program, unofficially or fail to return a leave of absence or dismissed from enrollment. The tuition returns policy is separate and distinct from the refund policy published in school catalog.

The Title IV, HEA funds are awarded to the student under the assumption that he/she will attend school for the entire period for which the aid is awarded. When student withdraws, he/she may no longer be eligible for the full amount of Title IV, HEA funds that were originally scheduled to be received. The amount of Title IV, HEA aid earned is based on the amount of time a student spent in academic attendance. Therefore, the amount of Federal funds earned must be determined. If the amount disbursed is greater than the amount earned, unearned funds must be returned. The order of return of unearned funds do not include funds from sources other than the Title IV, HEA programs.

As per the rule, CTK has 45 days (forty-five) from the date that its financial aid office determines that the student has withdrawn to return all unearned funds for which it is required to notify through a written notice to the student if s/he owes a repayment. In the written notice, CTK will advise the student or parent that s/he has 30 (thirty) calendar days from the date that the school sent the notification to accept a post withdraw disbursement. In case a response is not received by our institute from the student or parent within the allowed time frame or the student declines the funds, the school will return any earned funds minus the allowable outstanding charges, that the school is holding to the Title IV, HEA programs.

Earned AID

As per the United States Department of Education, the Title IV, HEA aid is earned in a prorated manner on a per diem basis of calendar days or clock hours, up to the 60% point in the payment period, and the Title IV, HEA aid is viewed as a 100% earned after that point in time. At CTK, a copy of the worksheet used for this calculation is kept in file by financial aid officer and can be verified by the financial aid director.

Withdraw Before 60% and After 60%

As per the United States Department of Education, CTK must perform a R2T4 to determine the amount of earned aid through the 60% point in each payment period or period of enrollment. The financial aid office will use the Department of Education prorate schedule to determine the amount of the R2T4 funds a student has earned at the time of withdraw. However, after the 60% point in the payment period or period of enrollment, the student has earned 100% of the Title IV, HEA funds s/he was scheduled to receive during this period. At CTK, its business office must still perform a R2T4 to determine the amount of aid that the student has earned.

The financial aid office measures progress in Clock Hours, and uses the payment period for the calculation.

The Calculation Formula

To determine the amount of the Title IV, HEA aid that was disbursed plus Title IV, HEA aid that could have been disbursed, CTK calculates the percentage of the Title IV, HEA aid earned:

a) Divide the number of clock hours scheduled to be completed in the payment period as of the last date of attendance in the payment period by the total clock hours in the payment period.

Hours Scheduled to Complete / Total Hours in Period = % Earned

b) If this percentage is greater than 60%, the student earns 100%.

c) If this percent is less than or equal to 60%, proceeds with calculation.

To calculate the amount of aid a student earned, the financial aid office of CTK follows this formula from the United States Depart of Education-

- Amount of aid Student has earned
- Percentage earned from (multiplied by) Total aid disbursed, or could have been disbursed

- Amount to Be Returned = Subtract the Title IV aid earned from the total disbursed.
- Unearned Percent = 100% minus percent earned
- Unearned percent (multiplied by) total institutional charges for the period = Amount Due from the School.
- If the percent of Title IV aid disbursed is greater than the percent unearned (multiplied by) institutional charges for the period, the amount disbursed will be used in place of the percent unearned.
- If the percent unearned (multiplied by) institutional charges for the period are less than the amount due from the school, the student must return or repay one-half of the remaining unearned Federal Pell Grant.
- Student is not required to return the **overpayment** if this amount is equal to or less than 50% of the total grant assistance that was disbursed /or could have been disbursed. The student is also not required to return an overpayment if the amount is $50 or less.
- The financial aid office of CTK will issue a grant overpayment notice to student within **30 days** from the date the school determine that the student withdrew, and gives student **45 days** to either:
- Repay the overpayment in full to CTK or Sign a repayment agreement with the U.S. Department of Education.

Order of Return

The Business Office of CTK is authorized to return any excess funds after applying them to current outstanding Cost of Attendance (COA) charges. A copy of the Institutional R2T4 work sheet performed is available through the office upon student request. At CTK, In accordance with Federal regulations, when the Title IV, HEA financial aid is involved, the calculated amount of the R2T4 Funds" is allocated in the following order:

- Unsubsidized Direct Stafford loans (other than PLUS loans)
- Subsidized Direct Stafford loans
- Parent Plus loans – received on behalf of the student
- Direct PLUS loans - received on behalf of the student
- Federal Pell Grants for which a Return is required
- Iraq and Afghanistan Service Grant for which a Return is required
- Federal Supplemental Educational Opportunity Grant
- Other Title IV, HEA assistance

Post-Withdrawal Disbursement policy

If a student did not receive all of the funds that s/he earned, student may be due a post-withdrawal disbursement. As per the United States Department of Education, If the post-withdrawal disbursement includes loan funds, CTK must get student's permission before it can disburse them. However, student may choose to decline some or all of the loan funds so that s/he does not incur additional debt. CTK may automatically use all or a portion of the students' post-withdrawal disbursement of grant funds for tuition and fees (as contracted with the school).

CTK needs student's permission to use the post-withdrawal grant disbursement for all

other school charges. If the student does not give permission (CTK may ask for this when student enrolled), then the student will be offered the funds. However, it may be in the best interest of the student to allow the school to keep funds to reduce the debt at the school. The financial aid office attempts to disburse the funds by check. If the check is not cashed, it must return the funds no later than 240 days after the date the school issued the check.If a check is returned to CTK, or an EFT is rejected, the financial aid office may make additional attempts to disburse the funds, if those attempts are made not later than 45 days after the funds were returned or rejected. When a check is returned or EFT is rejected and the school does not attempt to disburse the funds, the funds must be returned before the end of the initial **45-day** period. CTK must cease all attempts to disburse the funds and return them no later than 240 days after the date it issued the first check.

Post Withdrawal Disbursement Procedures

At CTK, the following specific officers are assigned responsibilities to implement the disbursement.

Financial Aid Officer

- Students will sign a document during the enrollment process stating whether they would like post-withdrawal disbursements monies to be used to satisfy fees that may have occurred during their enrollment.
- Place the signed form in their Financial Aid folder for the record

Business Officer

- Will be responsible for any post-withdrawal disbursement within 180 days from the date of determination of withdrawal.
- Will return an unclaimed Title IV, HEA credit balance no later than 240 days after the date it issued the first check.

Institutional Responsibilities related to the return of Title IV, HEA funds

Responsibilities of CTK regarding the Title IV, HEA funds are as follows:
Provide students information with information in this policy
Identify students who are affected by this policy and completing the return of Title IV, HEA funds calculation for those student

Return any Title IV, HEA funds due to the correct Title IV, HEA programs

- CTK is not always required to return all of the **excess funds**; there are situations once the R2T4 calculations have been completed in which the student must return the unearned aid.

Over payment of Title IV, HEA Fund

Any amount of unearned grant funds that a student must return is called overpayment. The amount of grant overpayment that a student must repay is the prorated amount of grant funds received or were scheduled to receive. A student must make arrangement with the office

of financial aid of CTK or Department of Education to return the amount of unearned grant funds

Student's Responsibilities related to the return of Title IV, HEA Fund

Returning to the Title IV, HEA programs any funds that were dispersed to the student in which the student was determined to be ineligible for via the R2T4 calculation.

At CTK, any notification of withdraw by the student should be in writing and addressed to the campus director or Financial Aid director. However, a student may cancel his or her notification of intent to withdraw by submitting a letter of intent to withdraw the cancellation notice in writing to the campus director.

The requirements for the Title IV, HEA program funds when a student withdraw are separate from any refund policy that CTK may have to return to the student is due to a cash credit balance. Therefore, a student may still owe funds to the school to cover unpaid institutional charges. CTK may also charge the student for any Title IV, HEA program funds that s/he is required to return on his/her behalf. It is the responsibility of the student to ensure the refund policy, by contacting to the admission officer of CTK .

Payment for Training

Payment for training offered by CTK Healthcare and Career Institute may be made by cash, credit or debit card, personal check, cashier's check or money order. A $30.00 fee will be charged for personal checks returned for insufficient funds. There is no interest charged for using the installment plan.

Transcript Fee

The first copy of the official student transcript is provided to the graduate or prospective employer at no cost. Subsequent copies of official transcripts will be provided at a cost of $25.00 per copy.

School Calendar

The following holidays will be observed, and school will be closed as follows:

MLK day
Juneteenth Day
Memorial Day
Labor Day
Day after Thanksgiving
Christmas Eve
Good Friday
Labor Day
Independence Day
Thanksgiving Day and
Day after New Year's Day

Hours of Operation

School facility will be available for
Class Room: Monday – Friday 9:00AM. to 10:00PM.
Admin office: Monday – Friday, 9:00AM. - 5:00PM

Program Start Schedule

Nurse Aide: Enrollment into the nurse aide program is mandatory to be completed one week

prior to the start of every new session. New class enrollment begins once the demand of number of students fulfills the minimum number of students required to make the class.

Continuing Education Seminar for Certified Nurse Assistant: Enrollment may be accomplished during normal office hours up to two-weeks before class begins. New class begins once the classroom activities of previous session ends.

Medication Aide Training: Enrollment may be accomplished during normal office hours up to two-weeks before class begins.

Structured Query language, Business Intelligent Developer & Java Analyst [SQL BI & Java]

Enrollment may be accomplished during normal office hours up to two-weeks before class begins.

Multiple seminar classes: Enrollment may be accomplished during normal office hours up to two-weeks before class begins. New class begins once the classroom activities of previous session ends.

Pharmacy Technician, Patient care Technician, Medical Assisting Programs, SQL BI Java, Medical Insurance Billing & Coding, Dental Assistance, and Vocational English as Second Language (VESL)

Depending upon the enrollment of students, new sessions in the morning or in the evening of all programs are scheduled to maintain the continuation status of the program. So new session starts prior or right at the end of the completion of the current session, dictated by the number of students enrolled. Programs normally start on first Monday of the week and externship is scheduled towards the end of the session.

Note: The course end date may varies due to inclement of weathers, and/or if the proposed start day falls on weekend and, any other extenuating circumstances

LVN: ***refer to the student handbook.***

Clinical sites

Students are practicing externships in various facilities. Students have to follow the practice Guidelines provided by clinical sites and by CTK. After completion of the externship, students need to submit proof of the document for graduation purposes. However, if the facility is not available because of Pandemic, students need to attend and complete the extensive lab operated in the campus.

Financial Aid

Pharmacy Tech, PCT, Medical Assisting, SQL, JAVA & JAVA and Medical Insurance Billing & Coding Programs are eligible for Federal Financial Aid.

MORE ABOUT PHARMACY TECHNICIAN PROGRAM

Trainee License

Students are required to apply for the Pharmacy Technician Trainee License within two weeks of enrollment. Students can visit Texas Board of Pharmacy (https://www.pharmacy.texas.gov/) for more information. FAFSA covers fee for training license

and fingerprints for the training license.
How to apply for training licensing

1. Tx state board of Pharmacy create Account (https://www.pharmacy.texas.gov/)
2. Apply for Ph tech training license
3. Schedule for finger printing

Failure to obtain Trainee License prohibits student from externship training.

Licensing Exam

Students are required to apply for the Pharmacy Technician licensing upon completion of the courses. Please visit Pharmacy Technician Certification Board (PTCB) (https://www.ptcb.org/) for the exam registration. Student will be able to apply for the job when they pass the PTC.

Fail Policy

Candidates can re-take exam 60 days after, for first 2 re-take attempts. Third retake attempt must be taken 6 months later. After that, appeal to PTCB board required.

PTCB review exam

Tutor and instructor at CTK will help students for the preparation of PTCB. Students may want to use computer lab and library of CTK for PTCB exam preparation.

CLASS SCHEDULES

All programs

CTK has open enrollment policy to enroll in Morning, evenings, afternoons and weekend Sessions. So the classes may be scheduled throughout the year, based on needs and enrollments numbers. Students may be allowed a 10-minute break every hour at 10 minutes until the hour during classroom training. Under no circumstance will break time exceed 10 minutes.

Continuing Education Seminar

Home Health Aide Seminar (HHA- Seminar), EKG/ECG Technician Training Seminar, EMR Technician Training Seminar, Phlebotomy Technician Training Seminar, Fundamentals of A & P and Medical Terminology Training Seminar, Continue Education Seminar for Pharmacy Technician, PTCB exam preparation review seminar, Medical Coding and Billing, and Computer Program Refresher seminars will be scheduled as per the needs of the students.

Breaks and Mealtimes

Students may be allowed a 10-minute break every hour at 10 minutes until the hour during classroom training. Under no circumstance will break time exceed 10 minutes. Students will not be allowed a meal break during the classroom portion of their training. During Externship, students may be allowed a one-hour meal break at a time determined by the clinical site supervisor.

Scheduled Vacation Periods

School has no Vacation Period but will observe all scheduled holidays.

GENERAL ADMISSION POLICY FOR ALL THE PROGRAMS

Students can apply for enrollment throughout the calendar year.

1. Students should be required to complete the pre enrollment form and will be evaluated by admission officer/admission committee.
2. US citizens and resident aliens are eligible to apply for admission. An adult (18 years or above) can apply directly for admission. However, a person with minimum age of 17 years can apply with written parental or legal guardian permission for admission.

   Application for Admission must include the following documents:
3. A completed Admission Application. An application must be submitted prior to enrollment in classes. Applications completed by a third party on behalf of the candidate will not be accepted. Students who owe any fee or tuition will not be permitted to enroll until the debt is settled.
4. A non-refundable application fee of $20.00 should be paid.
5. Every student be required to attend a New Student Orientation session and register for classes.
6. Show the original diploma or High School transcript from an accredited high school. OR General Education Development (GED): Provide official copies of your GED. OR, college transcript or Diploma.

Student can be admitted in “Conditional Status”. However, student cannot be graduated, failure to submit the missed items if s/he miss to provide any document per the program enrollment requirements

For the enrollment, please contact at CTK Healthcare and Career Institute, 3455 N. Beltline Rd, Suites 203, Irving, TX 75062-7861, (214) 441 – 3556.

ENROLLMENT REQUIREMENTS

General requirements

To be accepted into all programs applicants must

1. complete a pre-enrollment form
2. complete a personal interview with the school director or enrollment representative
3. an application for admission
4. be at least 18 years of age. If a student is 16 or 17 years of age during admission, a legal guardian also has to sign in the application for admission.

5. present proof of secondary education (high school diploma or college transcript or GED certificate)
6. not be listed as unemployable on the Employee Misconduct Registry (EMR), or
7. not have been convicted of a criminal offense listed in the Texas Health and Safety Code §250.006

Prospective students will not be denied admission on the basis of race, color, national origin, sex, handicap, age or veteran status (except where age, sex or handicap constitute a bona fide occupational qualification necessary to proper and efficient administration).

Specific Requirements

Nurse Aide

Note: Prospective students who have some education and /or work experience but did not receive high school diploma would be given an opportunity to take the Wonderlic Basic Skills Test which measures for basic verbal and math test for adults for training program eligibility as follows: **TEST: Wonderlic Basic Skills Test (Ability to Benefit) **SCORE:** 200 verbal / 210 quantitative skill of 500 (Note: Administer with paper & pencil and score using PC software)

8. not be listed on the Nurse Aide Registry in "revoked" status, or
9. not be listed as unemployable on the Employee Misconduct Registry (EMR), or
10. not have been convicted of a criminal offense listed in the Texas Health and Safety Code §250.006

Continuing Education Seminar for Certified Nurse Assistant

1. Admission prerequisite will serve as continuing education requirement for Certified Nurse Assistant in the State of Texas.
2. Individuals must be certified nurse aide/ assistant as evident by their submission of license or letter from Health and Human Services or (HHS).
3. not be listed on the Nurse Aide Registry in "revoked" status, or
4. not be listed as unemployable on the Employee Misconduct Registry (EMR), or
5. not have been convicted of a criminal offense listed in the Texas Health and Safety Code §250.006

Medication Aide Training

1. be able to read, write, speak and understand English.
2. be free of communicable diseases and in suitable physical and emotional health to safely administer medications;
3. be able to qualify as per the background check requirement of the State's Medication Aide office and have a criminal background check to include and submitting fingerprints
4. be employed as a Certified Nurse Aide listed on the Texas Nurse Aide Registry in

active status and currently employed in a facility licensed under Texas Health and Safety Code Chapter 242 on the class start date or

5. be employed on the class start date as a non-licensed direct care staff in a facility licensed under Chapter 247 or an ICF-MR facility, State School for the Mentally Retarded or for the Texas Department of Criminal Justice and have 90 days previous employment as non-licensed direct care staff in the year preceding the class start date and
6. provide a Long-Term Care Facility (LTC)** Commitment Form completed by authorized LTC Facility official.

**Failure to provide a properly completed and signed LTC Commitment Form will result in the applicant being denied entry into Medication Aide Training program.

Home Health Aide Seminar (HHA- Seminar)

In order to be accepted into the Home Health Seminar, applicants must:

1. have completed the Nurse Aide training administered as per the rules established state agency. A "Certificate of Completion" of Nurse Aide training must be submitted during enrollment.
2. not be listed on the Nurse Aide Registry in "revoked" status, or
3. not be listed as unemployable on the Employee Misconduct Registry (EMR), or
4. not have been convicted of a criminal offense listed in the Texas Health and Safety Code §250.006

Pharmacy Technician Training

1. complete a personal interview with the school director or enrollment representative;
2. have a criminal background check to include submitting fingerprints
3. register with the Texas State Board of Pharmacy (Board) as a pharmacy technician trainee
4. not have been convicted of a criminal offense listed in the Texas Health and Safety Code §250.006

   NOTE: Students enrolled in the pharmacy technician program failed to submit fingerprinting will not issue the Trainee license. Without a Trainee license, student cannot completes Externship portion of the program and cannot graduate from the program.

Patient Care Technician (PCT)

In order to be accepted into Patient Care Technician applicants must-

1. complete a personal interview with the school director or enrollment representative;
2. have a criminal background check to include submitting fingerprints and
3. not be listed on the Nurse Aide Registry in "revoked" status, or
4. not be listed as unemployable on the Employee Misconduct Registry (EMR), or
5. not have been convicted of a criminal offense listed in the Texas Health and Safety

Code §250.006

Medical Assisting (MA)

In order to be accepted into Medical Assisting program, applicants must-

1. complete a personal interview with the school director or enrollment representative;
2. have a criminal background check to include submitting fingerprints and
3. not be listed on the Nurse Aide Registry in "revoked" status, or
4. not be listed as unemployable on the Employee Misconduct Registry (EMR), or
5. not have been convicted of a criminal offense listed in the Texas Health and Safety Code §250.006

Structured Query language, Business Intelligent Developer & Java Analyst [SQL BI & Java]

In order to be accepted into SQL BI & Java

1. complete a personal interview with the school director or enrollment representative;
2. have a criminal background check to include submitting fingerprints and
3. not be listed on the Nurse Aide Registry in "revoked" status, or
4. not be listed as unemployable on the Employee Misconduct Registry (EMR), or
5. not have been convicted of a criminal offense listed in the Texas Health and Safety Code §250.006

Computer Basics Seminar

1. Proof of age of 17 or above
2. Basic Knowledge of English language and math
3. have a criminal background check to include submitting fingerprints and
4. not be listed on the Nurse Aide Registry in "revoked" status, or
5. not be listed as unemployable on the Employee Misconduct Registry (EMR), or
6. not have been convicted of a criminal offense listed in the Texas Health and Safety Code §250.006

Licensure Vocational Nursing (LVN)

In order to be accepted into LVN program, applicants must-

1. complete a personal interview with the school director or enrollment representative;
2. have a criminal background check to include submitting fingerprints and
3. not be listed on the Nurse Aide Registry in "revoked" status, or
4. not be listed as unemployable on the Employee Misconduct Registry (EMR), or
5. not have been convicted of a criminal offense listed in the Texas Health and Safety Code §250.006

Please see LVN student handbook

Medical Insurance Billing & Coding Specialist (MIS), and Dental Assistance Programs

In order to be accepted into MIS program applicants must-

1. complete a personal interview with the school director or enrollment representative;

2. have a criminal background check to include submitting fingerprints and
3. not be listed on the Nurse Aide Registry in "revoked" status, or
4. not be listed as unemployable on the Employee Misconduct Registry (EMR), or
5. not have been convicted of a criminal offense listed in the Texas Health and Safety Code §250.006
6. complete a personal interview with the school director or enrollment representative;
7. have a criminal background check to include submitting fingerprints and
8. not have been convicted of a criminal offense listed in the Texas Health and Safety Code §250.006

Vocational English as Second Language (VESL)

In order to be accepted into Vocational English as Second Language (VESL), applicants must-

1. complete a personal interview with the school director or enrollment representative;
2. have received a failing score on an English proficiency test approved by the CTK Admissions Committee and its policy,
3. have existing occupational or job skills, with limited English proficiency being a barrier to obtaining employment.

Surgical and Sterile Processing Technician Program

All students admitted into the Sterile Processing Surgical Technology Program must complete the following requirements before enrollment. Failure to submit any one of the following requirements would deny enrollment in the program.

1. **Criminal Background Check**: All students must pass a criminal background check upon acceptance to the program. The following criminal histories will result in disqualification from clinical placement and program admission:
    - **Felony convictions**
    - **Misdemeanor convictions or felony deferred adjudications** involving crimes against people (including personal or sexual abuse)
    - **Misdemeanor convictions** related to **moral turpitude** (e.g., prostitution, public lewdness/exposure)
    - **Felony deferred adjudications** involving the sale, possession, distribution, or transfer of narcotics or controlled substances
    - **Registered sex offenders**
2. **Physical Examination**: Students must submit documentation of a completed physical examination by a licensed physician, nurse practitioner (NP), or physician assistant (PA).
3. **CPR Certification**: Students must be certified in **Basic Life Support (BLS) for Healthcare Providers** through the **American Heart Association**. CPR license must remain current for the entire program
4. **Health Insurance**: Proof of active health insurance is required

5. **Immunizations and Titers**: Students must provide documentation of all required immunizations and titer results before orientation. Immunization report must remain current for the entire program.
6. **Drug Screening**: A urine drug screen must be completed before the first day of clinicals and may be required at any time during the program.
7. **Minimum Age Requirement**: Students must be at least **18** by the **first day of class**.

Associate in Applied Science in Healthcare Information Technology (AASHIT)

In order to be accepted into AASHIT program applicants must-

1. complete a personal interview with the school director or enrollment representative;
2. have a criminal background check to include submitting fingerprints and
3. not be listed on the Nurse Aide Registry in "revoked" status, or
4. not be listed as unemployable on the Employee Misconduct Registry (EMR), or
5. not have been convicted of a criminal offense listed in the Texas Health and Safety Code §250.006
6. complete a personal interview with the school director or enrollment representative;
7. have a criminal background check to include submitting fingerprints and
8. not have been convicted of a criminal offense listed in the Texas Health and Safety Code §250.006

Associate of Applied Science in Information Technology Cyber Security [AAS-IT CYBER]

In order to be accepted into AAS-IT Cyber program applicants must-

1. complete a personal interview with the school director or enrollment representative;
2. have a criminal background check to include submitting fingerprints and
3. not be listed on the Nurse Aide Registry in "revoked" status, or
4. not be listed as unemployable on the Employee Misconduct Registry (EMR), or
5. not have been convicted of a criminal offense listed in the Texas Health and Safety Code §250.006
6. complete a personal interview with the school director or enrollment representative;
7. have a criminal background check to include submitting fingerprints and
8. not have been convicted of a criminal offense listed in the Texas Health and Safety Code §250.006

Physical Therapy Technician (PTT)

In order to be accepted into Physical Therapy Technician applicants must-

1. complete a personal interview with the school director or enrollment representative;
2. have a criminal background check to include submitting fingerprints and
3. not be listed on the Nurse Aide Registry in "revoked" status, or
4. not be listed as unemployable on the Employee Misconduct Registry (EMR), or not have been convicted of a criminal offense listed in the Texas Health and Safety

RN/LVN Nursing Refresher Program

- Must have held an active or expired RN/LVN license in the U.S.
- Nursing school transcripts or diploma
- Proof of prior employment history
- Current immunizations, including TB test, Hepatitis B, MMR, and COVID-19 (varies by program).
- A valid Basic Life Support (BLS) CPR certification (usually from the American Heart Association or Red Cross).

Computer Program Refresher (CPR)

1. Proof of age of 17 or above
2. Basic Knowledge of English language and math

IV Therapy Certification Seminar

- Must of RNs & LVNs

Basic Math Seminar

High School Diploma/GED

NOTE; **Non-nurses cannot practice IV Therapy in the Nursing Home or Home Health setting and are NOT eligible for this course.**

CANCELLATION POLICY

A full refund will be made to any students who cancels the enrollment within 72 hours (until midnight of the third day excluding Saturdays, Sundays and legal holidays) after the enrollment. A full refund will also be made to any student who cancels enrollment within the student's first three scheduled class days. However, the school may retain administrative fees not to exceed $100 along with extra expenses that are necessary for the portion of the enrolled programs.

REFUND POLICY

1. Refund computations will be based on scheduled course time of class attendance through the last date of attendance. Leaves of absence, suspensions and school holidays will not be counted as part of the scheduled class attendance.
2. The effective date of termination for refund purposes will be the earliest of the following:
   a. The last day of attendance, if the student is terminated by the school.
   b. The date of receipt of written notice from the student; or
   c. Ten school days following the last date of attendance.
3. If tuition and fees are collected in advance of entrance, and if after expiration of the 72-hour cancellation privilege the student does not enter school, a nonrefundable administrative fees shall be retained by the school for the entire residence program or synchronous distance education course not to exceed than $100..

4. If a student enters a residence or synchronous distance education program and withdraws or is otherwise terminated, the school or college may retain not more than $100 in nonrefundable administrative fees for the entire program. The minimum refund of the remaining tuition and fees will be the pro rata portion of tuition, fees, and other charges that the number of hours remaining in the portion of the course or program for which the student has been charged after the effective date of termination bears to the total number of hours in the portion of the course or program for which the student has been charged. A student may not get a refund if the student has completed 75 percent or more of the total number of hours of the program for which the student has been enrolled and charged on the effective date of termination.
5. Refunds for items of extra expense to the student, such as books, tools, or other supplies should be handled separately from refund of tuition and other academic fees. The student will not be required to purchase instructional supplies, books and tools until they are required. Once these materials are purchased, no refund will be made. For full refunds, the school can withhold costs for these types of items from the refund if they were necessary for the portion of the program attended and separately stated in the enrollment agreement.
6. A student who withdraws for a reason not related to the student's academic status after the completion of 75 percent course work, the students shall be given a grade of "incomplete" upon the request and permitted to re-enroll in the course or program within 12-month period following the withdrawal date to complete the remaining courses without payment of additional tuition.
7. A full refund of all tuition and fees is due and refundable in each of the following cases:
    a. If an enrollee is not accepted by the school;
    b. If the course of instruction is discontinued by the school and this prevents the student from completing the course; or
    c. If the student's enrollment was procured as a result of any misrepresentation in advertising, promotional materials of the school, or representations by the owner or representatives of the school.

A full or partial refund may also be due in other circumstances of program deficiencies or violations of requirements for career schools and colleges.

8. Refund policy for students called to active military service.

    When a student withdraws from the school or college as a result of the student being called to active duty in a military service of the United States or the Texas National Guard may elect one of the following options for each program in which the student is enrolled:
    1. if tuition and fees are collected in advance of the withdrawal, a pro rata refund of any tuition, fees, or other charges paid by the student for the program and a cancellation of any unpaid tuition, fees, or other charges owed by the student for the portion of the program the student does not complete following withdrawal;
    2. a grade of incomplete with the designation "withdrawn-military" for the courses in

the program, other than courses for which the student has previously received a grade on the student's transcript, and the right to re-enroll in the program, or a substantially equivalent program if that program is no longer available, not later than the first anniversary of the date the student is discharged from active military duty without payment of additional tuition, fees, or other charges for the program other than any previously unpaid balance of the original tuition, fees, and charges for books for the program; or

3. the assignment of an appropriate final grade or credit for the courses in the program, but only if the instructor or instructors of the program determine that the student has:
    a. satisfactorily completed at least 90 percent of the required coursework for the program; and
    b. demonstrated enough mastery of the program material to receive credit for completing the program.
    c. The payment of refunds will be totally completed such that the refund instrument has been negotiated or credited into the proper account(s), within 60 days after the effective date of termination.

GRADING POLICY

CTK uses the following individual letter and numeric grading systems for all programs that includes quizzes, exams, class activities, clinicals and exams.
CTK Healthcare & Career Institute uses the following grading scale and making system. Any grade of "C" or higher on the classroom quizzes are considered satisfactory:
CTK Healthcare & Career Institute Grading Scale
A = 90-100
B = 80-89
C = 75-79
D = 60-74
F = 59 and below

Clinical: Skill and Clinical performance will be evaluated as satisfactory, needs improvement or unsatisfactory (using on Texas Nurse Aide Performance Records checklist for skills and performance assessment) as below. Students must have a score of 'S' to pass.
"S" = Satisfactory
"NI" = Need Improvement
"U" = Unsatisfactory

Grades may be provided in the transcript to students at the end of the program. As needed, student progress report (SPR) may be provided to the students in the half way of the program. CTK Healthcare and Career Institute uses average grade points as they accumulate through each section of study to assess student performance. Grade percentage will then be translated into grade point for comparative performance evaluation. If a student must retake a subject, the most current grade will be used to determine the student's overall Grade Point

Average (GPA).

Grades will be determined using the following scale:

91% - 100% tests, quizzes and performance of skills = A (4 Grade Points)
81% - 90% tests, quizzes and performance of skills = B (3 Grade Points)
71% - 80% tests, quizzes and performance of skills = C (2 Grade Points)
61% - 70% tests, quizzes and performance of skills = D (1 Grade Point)
0% - 60% tests, quizzes and performance of skills = F (0 Grade Points)

For LVN program please refer to the student's handbook

SATISFACTORY PROGRESS POLICY [SAP]

In our institute, Satisfactory Academic Progress (SAP) policy applies to all students enrolled in any authorized programs irrespective of the eligibility or ineligibility to the Title IV, HEA funds. Students should maintain SAP to continue eligibility for Title IV, HEA funding along with a good cumulative educational work during a length of the program. Students' good attendance and excellence in academic will be considered toward meeting requirements for the Title IV, HEA funds throughout the program. Moreover, any low perming students will receive necessary advice to improve their academics as well as attendance in a timely manner.

At CTK, satisfactory progress in attendance and academic work are the requirements to receive the Federal Title IV, HEA funds. To determine SAP, all students are evaluated in their academic performance and attendance through the Evaluation point. The progress of evaluation period for Title IV purposes will be performed at the mid-point of the program. In addition, if the student meets a minimum grade of C or 70% GPA, by the end of the last payment period, the student will be meeting the SAP. The minimum requirement of pace of attendance of 67% is expressed in calendar time by reviewing hours and weeks at SAP checkpoints. This is measured by dividing the student's successfully completed clock hours by scheduled clock hours and by dividing the number of weeks successfully completed hours. Students will be awarded a diploma certificate upon successful completion of the program.

For LVN program please refer to the student's handbook

ACADEMIC PROBATION

Any student failing to maintain at least a 70% average score in the program of study as kept in student's record by the instructor or the record office, is subject to probation. During the Academic probation (which is not the same as a Title IV, HEA Warning and/or Probation) the student's performance will be monitored and additional academic assistance will be given in an effort to assist the student in being removed from Academic Probation. The student must correct the deficiency that caused the probation and must do so before the next evaluation period. Failure to improve during an Academic probationary period may subject the student to dismissal.

For LVN program please refer to the student's handbook

ATTENDANCE, LEAVE OF ABSENCE, WITHDRAWAL, AND MAKE-UP POLICY

Attendance Policy

In CTK, Students are expected to attend classes as per their enrollment agreement. Students are responsible to clock in and out appropriately to document their attendance. It is every instructor's responsibility to record the attendance of each student in case students miss the opportunity to mark their -in and -out time in the attendance sheet. Instructors/support staffs take class attendance and a student must make sure his/her attendance is recorded correctly, as Financial Aid Students must attend a minimum of 67% of the cumulative scheduled hours to maintain SAP and complete the course within the maximum allowed period. It is expected that students should begin to develop the qualities of promptness and dependability from the day they begin their training. Early departures, tardiness, and class cuts will be recorded in quarter-hour increments. A period of 15 minutes will be counted as a quarter-hour of absence. Instructor/support staff should provide the attendance record of each student to the Record officer each week who si responsible to maintain student's records as part of the student's permanent academic record.

Leave of Absence Policy

Students who need to interrupt their program of study because of a medical condition, for a Family Medical Leave Act (FMLA) circumstance, active military service, jury duty obligation, or other severe or unanticipated personal circumstance, may make an application for a Leave of Absence. Students experiencing these types of circumstances should discuss with the Director or his/her designee and take a Leave of Absence (LOA). The applicant for the LOA should be making Satisfactory Academic Progress, be current in his or her tuition and fees obligation. Students wishing to take a leave of absence for more than five (5) days shall apply to the director in writing stating the reason for the leave of absence. For valid reason, school director can approve the leave of absence for up to 180 (one hundred eight) class days. To receive the LOA, a student needs to submit documented proof of the reason for the leave of absence.

- Requests for a leave of absence will be made in writing.
- Students may have no more than two leave of absences in a 12-month period. Students making payments on their tuition remain under that obligation during a Leave of absence. .

Student must contact the School the week before the return so that arrangements can be made to accommodate in the classroom. Students returning from a leave of absence will reenter their program at the beginning of the subject they were completing at the time they began their leave of absence. Students who fail to return to class on their schedule date will be dropped from the course.

Withdrawal Policy

Should students be considering withdrawing from a course or from the Institute, they

should meet with the Director, to gain an appreciation for what the Institute can do to help them solve their problems and to gain a complete understanding of the decision they are about to make. If a student decides to proceed with withdrawal, the student must provide notification to CTK in writing and meet with the Director of Financial Aid to understand the Student Responsibility (see below). Students who withdraw from a course or from the Institute will receive a grade of "W" if they withdraw before or at the time of attending 50% of the scheduled class days of the course. If students withdraw after attending 50% or more of the scheduled days of the course, they will receive a "WF" grade. The grade will be recorded on their transcript. A "WF" grade is regarded the same as an "F" grade in determining whether the student can remain enrolled in the program. A student who does not attend the classes of 14 days calendar period (excluding school holidays and breaks) without any written notice to the school will be considered as withdrawn from the classes. All students must satisfactorily complete the scheduled clinical or externship hours within the assigned grading period. If students withdraw without written or verbal notice, or if students fail to return from a Leave of Absence, termination shall take effect on their last day of attendance.

For LVN program please refer to the student's handbook

PROGRAM COMPLETION/GRADUATION POLICY

General

- Complete all required coursework with a minimum 2.0 GPA
- Satisfy all financial obligations to CTK Healthcare and Career Institute
- Satisfactorily complete all skills identified on the CTK Healthcare and Career Institute program Externship Monitoring Form
- Completion duration of programs as shown under the program outline
- Complete all required coursework with a minimum of 77% completion of contact hours (Pharmacy Technician and Patient Care Technician). For Nurse Aid & Medication Aide- students need to complete all the contact hours as per THHSC
- Submitting official transcript and/or the Diploma of all the coursework attempted at previous career schools when required
- Satisfy all obligations including financials to CTK Healthcare and Career Institute
- Complete all the forms needed as provided by the Financial Aid Officer or School Director
- Return all the borrowed items to CTK Healthcare & Career Institute

For LVN program please refer to the student's handbook

TRANSFER POLICIES

Transfer of students between programs within the institution

If a student who is enrolled in one program at this institution and desires to transfer to another program, he or she may contact the School Director or Academic Dean to discuss the matter. In order to be considered for any transfer, the student must be in good standing in the current training program. For example, the student must have an attendance rate of 80% or above, and must be maintaining a grade of "C" or better in the course work. Any transfer of a training program is evaluated on a case-by-case basis and must be agreed upon by the Admission Committee comprising the Academic Dean, Chief Administrative Officer and the School Director.

Transfer of Students to Other Institutions

The transferability of credits and certificate you earn at CTK Healthcare Institute is at the complete discretion of an institution to which you may seek to transfer. . If the certificate that you earn at CTK is not accepted at the institution to which you seek to transfer, you may be required to repeat some or all of your coursework at that institution. For this reason, you should make certain that your attendance at this institution will meet your educational goals. This may include contacting an institution to which you may seek to transfer after attending CTK Healthcare Institute.

Transfer of Credits Earned at any Other Institutions

CTK may grant academic credit for courses which have successfully completed the same or substantially the same subjects on a post-secondary level as listed in the Catalog. The student must have earned a grade of "C" or better and the student must have been taking coursework at the postsecondary level prior to their expected start date. Student should provide the following documents requesting the transfer of credit.

- Request for the transfer of credit
- Copy of transcripts or Diploma
- In exceptional cases, CTK accepts the Skills earned through taking continue education and/or seminar courses from the previous institute

CTK admission committee comprised of Academic Dean, Financial Aid Director and Director of the school, has full authority to evaluate the student's academic credentials to provide credit towards the intended program. Transfer of credit is evaluated on a case-by-case basis. The final decision to grant credit for prior schoolwork shall be approved by the Campus Director and shall be placed in the student's file for the record. If a student believes that, his/her prior knowledge or experience is sufficient to waive a class requirement, a comprehensive test will be administered to the student. A minimum grade of "B" is required in order to waive the class. This test is to be taken in advance, if possible, but not later than the first week of the class. Upon successful completion of the test, CTK may waive the class in favor of reducing time in school. At CTK, the maximum transfer or waiver has a limit of up to 299 clock hours in Pharmacy technician and Patient Care Technician program. However, there is no transfer of credit for Nurse Aide and Medication aid program as the contact hours are set by the state agency of the respective program.

In exceptional cases, CTK may consider granting credit from previous work experiences in the program related filed as per the decisions of admission committee.

For LVN program please refer to the student's handbook

GRIEVANCES/COMPLAINT RESOLUTION POLICY

If you are or were recently a student of CTK Healthcare and Career Institute (licensed by the Texas Workforce Commission) and are having a problem with the school, you should first attempt to get the school to address your concerns, following the "Grievance" or "Complaints" policy explained below. If your problem is not resolved, you may file a complaint with Career Schools and Colleges.

Any student complaint must be discussed or directed to the Instructor following the appropriate chain of commands. This complaint must be in writing. If the student and the Instructor or Program Director cannot come to an agreement, the complaint must be presented to the School Administrator to resolve.

Student may choose to email the school Administrator directly at **ctkhealthcare@gmail.com**

OR

Call 940-594-8910 with compliant.

Students are advised to direct an unresolved grievance to:

Texas Workforce Commission
Career Schools and Colleges
101 East 15th Street
Austin, Texas 78778-0001

And/ OR
Council on Occupational Education (COE)
7840 Roswell Rd
Building 300, Suite 325
Atlanta, GA 30350
Ph # 800-917-2081

BEHAVIOR AND STUDENT CONDUCT/Dismissal policy

The following are student responsibilities: Failure to follow the following rule results the dismissal of student from the program

- Maintain satisfactory scores of at least 70% in the program of study
- Not to discriminate against any other person because of race, age, sex, sexual orientation national origin, or handicap.

- Discuss grievances informally with the persons involved before invoking formal grievance action. Formal grievance action is outlined in the Catalog.
- Respect persons and the property of others. At all times, all personal property is the sole responsibility of the student, and the Institute does not assume liability for any loss or damage. Clothing and other small items should be marked clearly with the student's name and address. Vehicles should always be locked to avoid theft.
- Unauthorized use of notes or materials in exams, including talking to other students
- Forging or altering assignments
- Refusal to follow instructor's instructions during clinical, didactic and Media class
- Allowing others to copy or use work that is not his or her own
- Knowingly furnishing false information to the Institute
- Theft of the Institute's property; theft, damage, forgery, alteration, misuse or mutilation of the Institute's documents, records, identification, educational materials, or property
- Interfering with the right of others to an education; violation of safety and security rules, bringing animals or children into class
- Hazing, on or off Institute property
- Discourteous, disruptive or disrespectful to fellow students, faculty, and staff on or off campus
- Physical or verbal abuse of any person or engaging in conduct like beating, which threatens or endangers the health or safety of others
- Unauthorized entry or use of facilities
- Intentional or unauthorized interference with a right of access Institute facilities or freedom of movement or speech of any person on the premises
- Unlawful possession, use, or distribution of illicit drugs, smoking and alcohol on campus or during any student activities. If a student appears to be under the influence of drugs or alcohol in a clinical, class, or laboratory experience, that student will be removed from the learning experience. A student thought to be under the influence of drugs or alcohol will be mandated to have a Rapid Drug Screen and/or a Breath Alcohol level performed within 45 minutes of being removed from the learning experience; these tests will be at the Institute's expense.
- Use or possession of firearms, ammunition, or other dangerous weapons or substances prohibited by law
- Disorderly, lewd, indecent, obscene, or sexually harassing conduct or expression
- Violation of federal, state, or local ordinances including, but not limited to, those covering alcoholic beverages, narcotics, gambling, sex offenses or arson, of which violation occurs on Institute property or at a Institute function (Please refer to the Drug Free Policy established by the Institute for further information.)
- Unauthorized solicitation of students, staff, or faculty on- campus or online for any product or service
- Misuse of electronic equipment, copiers, faxes, e-mail accounts, or internet services, including viewing any material or sending any message that is obscene, harassing, or threatening to any individual
- Aiding, abetting, encouraging, or participating in a riot

- Failure to comply with the verbal or written directions of any Institute official acting within the scope of his or her authority, or resisting a security officer performing his or her duty

For LVN program please refer to the student's handbook

INTERNET USAGE POLICY

- Students should always ensure that the information contained in the Internet email messages and other transmissions is accurate, appropriate, ethical, and lawful.
- The equipment, services, and technology provided via the Internet are the property of the Institute. As such, the Institute reserves the right to monitor Internet traffic, and retrieve and read any data composed, sent, or received through its online connections and stored in its computer systems.
- Data that is composed, transmitted, accessed, or received via the Internet must not contain content that could be considered discriminatory, offensive, obscene, threatening, harassing, intimidating, or disruptive to any employee or other person. Examples of unacceptable content may include, but are not limited to, sexual comments or images, racial slurs, gender-specific comments, or any other comments or images that could reasonably offend someone on the basis of race, age, sex, religious or political beliefs, national origin, disability, sexual orientation, or any other characteristic protected by law.
- The unauthorized use, installation, copying, or distribution of copyrighted, trademarked, or patented material on the Internet is expressly prohibited. As a general rule, if a student did not create the material, does not own the rights to it, or has not secured authorization for its use, it should not be put on the Internet.
- The following behaviors are examples of previously stated or additional actions and activities that are prohibited and can result in disciplinary action: Sending, printing or posting discriminatory, harassing, or threatening messages or images. Stealing, using, or disclosing someone else's code or password without authorization. Copying, pirating, or downloading software and electronic files without permission. Violating copyright law. Participating in the viewing or exchange of pornography or obscene materials · Sending or posting messages that defame or slander other individuals. Posting on behalf of the Institute, without explicit permission from the Campus President of the Institute. Posting or discussing confidential patient/client information related to externship and clinical experiences, or any information or photographs concerning patients/clients or their families. Posting work-related pictures of Institute employees, students, or anyone associated with the Institute, without that person's permission. Attempting to break into the computer system of another organization or person. Performing operations against another organization's computers or networks intended to identify security vulnerabilities or disrupt service
- Students presently enrolled at the school must know that they are liable and responsible for anything they post to social media sites, such as Facebook, LinkedIn, Twitter, YouTube, texting, blogs, and online discussion groups.

- Students are prohibited from posting confidential or proprietary information about the school, its students, and faculty or staff members on a social media site.
- Students are prohibited from sharing, disseminating or transmitting electronic information that reveals any private or confidential information they may have learned about others (including patients) during their tenure at the school or externship sites.
- Applicable federal and state requirements, such as FERPA and HIPAA, are to be followed at all time. When participating in any form of social media, students are encouraged not to misrepresent themselves, and to make postings that are both meaningful and respectful without any kind of slanderous or offensive language that may be aimed at any member or group of the college community. The use of any social media sites to harass, intimidate or bully a fellow student, faculty, member of the college and/or affiliate is strictly prohibited and will not be tolerated. When posting on social media sites, students must be mindful of all copyright and intellectual property rights, especially those reserved by the school.
- The use of the school logo, image, or iconography on personal social media sites to endorse a particular political party or candidate or to promote a product, cause, or event is strictly prohibited.
- Students are expected to obey the Terms of Service of any social media site.
- Students who violate this policy may face disciplinary actions, up to and including dismissal from school.

EDUCATIONAL DELIVERY SYSTEMS

At CTK, courses are taught through a combination of didactic, media service, laboratory, library reading hours, one to one or group discussion with instructor, and practical learning through techniques used to engage all kind of learners, identified on each syllabus/supplementary techniques and curriculum for Patience Care Technician and Pharmacy Technician programs. Lab hours may be scheduled differently from classroom hours and may vary continuously throughout the program. Lecture classes are delivered by qualified instructors, in a traditional classroom with appropriate learning resources such as textbooks, handouts and other resources. In exceptional circumstances, CTK may use technology to remotely engage synchronously in the class activities. In order to engage the students more effectively, instructors may take help of support staff to run the classes using multimedia materials through internet access and computer projection devices in Media room. Lab classes, media service, one to one or group discussion and hands-on learning verbal activities either led, guided, or supervised by an instructor, or performed by students in groups or individually with the help of qualified support staff. Such learning activities may take place in a dedicated laboratory, office desks, media center, library or a regular classroom with the appropriate learning resources and/or equipment and tools, as needed. Clinical and/or externship courses typically take place at a qualified clinical/externship site, and students perform tasks under the guidance of a site supervisor and/or a clinical instructor.

For LVN program please refer to the student's handbook

Dress Code policy or Nurse Aide Clinical

Students will need to acquire the following personal items that may be purchased locally or ordered from a catalog.

- Scrubs
- 1 pair of clinic type shoes. (Athletic shoes are acceptable if they are clean and very white)
- Wristwatch with a second hand.

Note: Nail polish or artificial nails are not allowed, and long hair must be pulled back for clinical.

Policy for Community Grant Award

In an aim to help the needy student, CTK collects the funds from Non for profit or from for profit organizations to set up "Community Grant". Students may be able to receive the community grant for the needy student, shall the grant is available. If the community grant is available, the admission committee comprised of Academic Dean, Financial Aid Director and Director of the school, has full responsibility to evaluate the student's financial and academic status to award the grant to a particular student to the extend the fund is available.

Job Placement Policy (*Note: CTK does not guarantee job placement*)

CTK has developed a plan to assists its students for their placement in the job market. The purpose of this plan is to ensure to assist its student ready from preparation to place in job market.

Responsible person: The student service Coordinator is responsible for implementing the plan.

Outlines of the activities: Following are the outlies of activities to achieve the objectives of the plan

1. Resume preparation class and help
2. Career counseling and job search tips including assist in resume preparation
3. Inform the students for the job fair/Availability in healthcare facility
4. Connect students with job placement agencies
5. Establish social media, communication network with former graduates in the job market including staff and instructors to find the avenues to grab the opportunity for its students.
6. Be proactive to find the job fairs, hiring through direct communication or by electronic means and post the opportunity in the campus for the student access and/or call, text, email them.
7. Track of employment, license pass rate records and employer information of the completers
8. Interview preparation skills

Review, Evaluation & Revision of the Plan: The plan will be reviewed at least once a year in the staff meeting and/or to the Institutional Advisory Board. The plan once revised will be made public in the notice board of the campus.

Student Retention Plan

CTK has established its institutional retention plan to increase the rate of completion and success in the program.

Responsible Person:

This responsibility goes to Student Service Coordinator (SSC) who organizes meeting of low perform student with the class instructor and the student advising headed by the Director.

List of Activities:

1. Instructor inform the SSC about the low performance of student in the class
2. SSC organize meeting of instructor, student and Director
3. Director Includes input from faculty and students and makes a creative plan for the student in concern
4. Director suggest using the recommended plan to the students for his/her success in the course.

Reviewed, evaluated and revised: This policy is evaluated on an annual basis by the staff meeting and/or by the institutional advisory board, as needed. The results of the plan are shared with faculty and staff by SSC

Approved and Regulated Statement

CTK Healthcare and Career Institute is Approved and Regulated by the Texas Workforce Commission, Career Schools and Colleges, Austin, Texas.

True and Correct Statement

The information contained in this catalog is true and correct to the best of my knowledge.



Dr. Prem Adhikari
School Administrator/Director

Nurse Aide [based on HHSC curriculum]

Subject #	Subject Title	Clock Hours Lec / Lab / Ext / Total
NA 101	Introduction to Long Term Care (LTC)	16 / 00 / 00 / 16
NA 102	Personal Care Skills	08 / 06 / 00 / 14
NA 103	Basic Nursing Skills	06 / 04 / 00 / 10
NA 104	Restorative Services	06 / 00 / 00 / 06
NA 105	Mental Health and Social Service Needs	08 / 00 / 00 / 08
NA 106	Social Skills	06 / 00 / 00 / 06
NA 107	Nurse Aide Clinical Practice	00 / 00 / 40 / 40
Total Hours		**50 / 10 / 40 / 100**

The approximate time required to complete the Nurse Aide program is of 3 weeks up to four weeks.
Maximum time allowed for completion of this program is seven weeks.
Graduates of the Nurse Aide Training Program will be awarded a Certificate of Completion.

Continuing Education Seminar for Certified Nurse Assistant

Course Number	Subject Title	Number of Hours
CE 101	Introduction to Long Term Care (LTC)	4
CE 102	Personal Care Skills	4
CE 103	Basic Nursing Skills	4
CE 104	Restorative Services	4
CE 105	Mental Health and Social Service Needs	4
CE 106	Social Skills	4
Total		**24**

Students satisfactorily completing this program will be awarded a Certificate of Completion.

Medication Aide Training

Subject #	**Subject Title**	**Clock Hours Lec / Lab / Ext / Total**
MA 101	Introduction, Orientation and Basic Concepts	07 / 01 / 00 / 08
MA 102	Administration of Medications	19 / 07 / 00 / 26

MA 103	Drugs Affecting the Cardiovascular System	04 / 01 / 00 / 05
MA 104	Drugs Affecting the Urinary System	04 / 00 / 00 / 04
MA 105	Drugs Affecting the Respiratory System	04 / 01 / 00 / 05
MA 106	Drugs Affecting the Digestive System, Vitamins and Minerals	05 / 01 / 00 / 06
MA 107	Drugs Affecting the Central Nervous System	04 / 00 / 00 / 04
MA 108	Drugs Affecting the Musculoskeletal System	04 / 00 / 00 / 04
MA 109	Drugs Affecting the Endocrine System	07 / 02 / 00 / 09
MA 110	Antibiotics and Other Anti-Infective Agents	04 / 00/ 00 / 04
MA 111	Drugs Affecting the Eye	04 / 02 / 00 / 06
MA 112	Drugs Affecting the Ear	04 / 01 / 00 / 05
MA 113	Drugs Affecting the Skin	03 / 02 / 00 / 05
MA 114	Alzheimer's Disease and Related Disorders	12 / 00 / 00 / 12
MA 115	Immuno-Compromised Residents	04 / 01 / 00 / 05
MA 116	Pediatric Patients	07 / 01 / 00 / 08
MA 117	Care Planning Assistance	04 / 00 / 00 / 04
MA 118	Medication Aide Clinical Externship	00 / 00 / 10 / 10
MA 119	Return Skills Lab	00 / 10 / 00 / 10
Total Hours		**100 / 30 / 10 / 140**

The approximate time required for students to complete this program is nine (9) weeks. Maximum time allowed for completion of the Medication Aide Training Program is fourteen (14) weeks. Students satisfactorily completing Medication Aide Training will be awarded a Certificate of Completion.

Home Health Aide Seminar (HHA- Seminar)

Subject Title	**# hours**
Qualities & Characteristics of a home health aide	2
The home environment	2
Ethics	2
Infection Control	2
Housekeeping skills	2
Safety Issues	2
Dietary considerations & meal planning	2
Personal care	2
Observation, reporting, and recording	2
Personal safety	2
Total	**20**

Pharmacy Technician Training

Subject #	Subject Title	Clock Hours Lec/Lab/Ext/Total	Quarter Credit Hours Lec/Lab/Ext/Total
PT 101	The Profession of Pharmacy, Pharmacy Law, Regulations and Standards for Technicians	10 / 00 / 00 / 10	01/00/00/01
PT 102	Drugs, Dose Forms, Delivery Systems and Routes of Administration	10 / 00 / 00 / 10	01/00/00/01
PT 103	Basic Pharmaceutical Measurements and Calculations	100 / 60 / 00 / 160	10/03/00/13
PT 104	Medical Anatomy and Physiology	30 / 20 / 00 / 50	03/01/00/04
PT 105	Medical Terminology	04 / 04 / 00 / 08	0.4/0.2/00/0.6
PT 106	Pharmacology I	40/ 00 / 00 / 40	04/00/00/04
PT 107	Dispensing Medications in the Community Pharmacy	04 / 04 / 00 / 08	0.4/0.2/00/0.6
PT 108	Pharmacology II	40 / 00 / 00 / 40	04/00/00/04
PT 109	Medication and Prescription Orders and Their Calculations	40 / 40 / 00 / 80	04/02/00/06
PT 110	Extemporaneous Compounding	06 / 04 / 00 / 10	0.6/0.2/00/0.8
PT 111	Hospital Pharmacy Practice, Infection Control, Hospital Calculations	20 / 20 / 00 / 40	02/01/00/03
PT 112	Preparing Sterile Intravenous Products	10 / 10 / 00 / 20	01/0.5/00/1.5
PT 113	Pharmacology III	40 / 20 / 00 / 60	04/01/00/05
PT 114	Medication Safety	40 / 24 / 00 / 64	04/1.2/00/5.2
PT 115	Role of Pharmacy Technician, Health Insurance billing and Employment Strategies	10 / 05/ 00 / 15	01/0.25/00/1.25
PT 116	Pharmacy Technician Extensive lab/Externship	00 / 00 / 180 / 180	00/00/06/06
PT 117	PTCB Exam Preparation	85 / 20 / 00 / 105	8.5/1/00/9.5
Total		**489/ 231/ 180 / 900**	**48.9/11.55/06/66.45**

The approximate time required to complete Pharmacy Technician program is twenty-six (26) weeks along with practical/clinical work. Maximum time allowed for completion of the program is thirty-four (36) weeks. This course is offered fully online.

Mode of delivery will be of 100% online learning through Learning Management System (LMS) to provide audio, visual and conferencing tools as needed.

Patient Care Technician

	Subject Title	Clock Hours Lec / Lab / Ext / Total	Quarter Credit Hours Lec/Lab/Ext/Total
PHIT 200-1	Technology in Health Care [Part I]	30/15/00/55	03/0.75/00/4.08
PHIT 200-2	Technology in Health Care [Part II]	30/15/00/61	03/0.75/00/4.28
PBIS 300-1	Principle, Scope and Role of Patient Care Technician	12/00/00/12	1.2/00/00/1.2
PPNC 300-2	Pre-Professional and Professional Nursing Concepts	15/10/00/25	1.5/0.5/00/02
PNSP 300-3	Nursing and Medication Pathways	100/20/00/150	10/01/00/12
HHA 300-4	Home Health Aide	10/05/00/17	01/0.25/00/1.32
PAAP 400-1	Anatomy & Physiology for Allied Health	25/15/00/50	2.5/0.75/00/3.58
PMET 500-1	Medical Terminology	10/05/00/15	01/0.25/00/1.25
PCPR 600-1	Cardio Pulmonary Recitation	20/10/00/30	02/0.5/00/2.5
PEKG 600-2	Basic Electro Cardiography	10/40/00/50	01/02/00/03
PEKG 600-3	Advanced Electro Cardiography	30/10/00/50	03/0.5/00/3.83
PHEL 700-1	Introduction to Phlebotomy Procedures	10/05/00/15	01/0.25/00/1.25
PHEL 700-2	Terminology & functions of Body system related to Phlebotomy	10/05/00/15	01/0.25/00/1.25
PHEL 800-1	Fundamental of Diseases	30/10/00/40	03/0.5/00/3.5
PHEL 800-2	Infection, Process and control techniques	30/20/00/70	03/01/00/4.67
PHEL 800-3	Clinical Theory in Safety and Confidentiality	20/00/00/25	02/00/00/2.17
PHEL 900-1	Venipuncture	20/10/00/40	02/0.5/00/2.83
PHEL 900-2	Types of Phlebotomy Practices	15/05/00/20	1.5/0.25/00/2.08
PHEL 900-3	Specimen Collection & Use of Equipment Lab I	10/10/00/25	01/0.5/00/1.67
PHEL 900-4	Specimen Collection and Urinalysis Lab II	10/10/00/25	01/0.5/00/1.67
SLE 101	Skills and License Exam Review	100/00/120/220	10/00/3.77/7.33
Total Hours		547/120/233	54.7/11.00/3.77/69.47

The approximate time required to complete Patient Care Technician program is twenty-six (26) weeks along with practical/clinical work. Maximum time allowed for completion of the program is thirty-four (36) weeks. Once completed students will also receive the seminar certificates for Phlebotomy, EKG, EMR and Anatomy & Physiology, Infection control Technician and Medical Terminology including certificate for Nurse Aide Training and Patient care Technician.

Mode of delivery will be hybrid that includes the combination of face to face, externship, and online learning through Learning Management System (LMS) to provide audio, visual and conferencing tools as needed.

Medical Assisting

Subject#	Subject Title	Clock Hours Lec/Lab/ Ext/Total	Q. Credit Hours Lec/Lab/ Ext/Total
Medical Secretaries			
MS 101	Medical Office Study	10/00/10/20	01/00/0.67/1.67
MS 201	Medical Office Management I	20/04/06/30	02/0.2/0.2/2.4/4.8
MS 202	Medical Office Management II- Mastering Medical Language	20/10/10/40	02/0.5/0.33/2.83
MS 301	Medical Insurance, Law, and Ethics	20/06/04/30	02/0.30/0.13/2.43
MC 501	Computer Basics [EMR]	15/05/00/20	1.5/0.25/00/1.75
Administrative Medical Assisting			
MA 101	Basic Anatomy and Physiology Medical Terminology	20/05/00/25	02/0.25/00/2.25
MA 201	Vital signs & Documentation of Medical Histories	10/05/00/15	1/0.25/00/1.25
MA 301	Medical Office Manager procedures I	10/05/05/20	1/0.25/0.25/1.50
MA 302	Medical Office Manager procedures II	15/05/05/25	1.5/0.25/0.17/1.92
PH 101	Basic Pharmacology	15/00/05/20	1.5/00/0.17/1.67
EK101	Electrocardiogram [EKG]	20/10/00/30	02/0.5/00/2.5
Medical Coding and Billing			
MC 601	Coding for Medical Procedures	30/20/50/100	03/01/1.67/5.67
MC 701	Medical Billing/Office Software	00/50/00/50	00/2.5/00/2.5
MC 801	CPT Coding	50/50/00/100	05/2.5/00//2.5
MC 901	ICD-10 Coding	50/50/00/100	05/2.5/00/2.5
Clinical Medical Assisting			

PHEL 101	Introduction to Phlebotomy Types and Procedures	15/05/10/30	1.5/0.25/0.33/2.08
PHEL 201	Infection, process, and Control techniques	10/05/20/35	01/0.25/0.67/1.92
PHEL 301	Clinical Theory in Safety and Confidentiality	08/02/00/10	0.2/0.1/00/0.3
PHEL 401	Venipuncture	10/06/05/21	01/0.3/0.17/1.20
PHEL 501	Specimen collection & Use of Equipment Lab	15/05/15/35	1.5/0.25/0.5/1.75
PH 201	Medications, Dosage Calculations & Basic Pharmacology	10/04/10/24	01/0.2/0.331.53
REV 201	Skills Review	00/00/70/70	00/00/2.33/2.33
LMP 101	Certification Review, Exam Preparation & Licensing	50/00/00/50	2.5/00/00/2.5
Total		**493/247/160/900**	**46.52**

The approximate time required to complete Medical Assisting program is twenty-six (26) weeks. Maximum time allowed for completion of the program is thirty-four (36) weeks.

Mode of delivery will be hybrid that includes the combination of face to face, externship, and online learning through Learning Management System (LMS) to provide audio, visual and conferencing tools as needed.

SQL BI & Java

Course Name	**Topic**	**Lecture/lab(practice)/Internship/Total**	**Quarter hour Lect/lab/Intern**
SID-101	Introduction & practice on BI Developer	10/12/22	01/0.6/1.6
SID-102	Basic Sequel	07/15/22	0.7/0.75
SID-103	Advanced Sequel	08/14/22	0.8/0.7
SID-104	Sequel Performance	10/12/22	01/0.6
SID-201	BI, Architecture, ETL & Others	10/12/22	01/0.6
SID-202	Power BI	10/14/24	01/0.7
SID-203	Power BI Advanced	10/14/24	01/0.7
SID-301	Service	10/12/22	01/0.6
SID-401	Analytics with Phyton	10/10/20	01/0.5
SID-501	Analytics with R & Java	100/100/200	10/05
SID-601	Capstone Project	02/45/47	0.2/2.25
SID-701	Job Search Skills	02/06/08	0.2/0.3
SID-801	Internship	00/445	00/14.83

	Total	**189/266/445**	**18.9/13.3/14.83/47.03**

The approximate time required to complete SQL BI & Java is twenty-six (26) weeks. Maximum time allowed for completion of the program is thirty-four (36) weeks. This course is offered fully online.
Mode of delivery will be of 100% online learning through Learning Management System (LMS) to provide audio, visual and conferencing tools as needed.

Vocational Nursing Curriculum

Course Number	Course Title	Lecture Hours	Lab Hours	Clinical Hours	Contact Hours
VN100	Basic Anatomy and Physiology	48			48
VN101	Vocational Roles	24			24
VN102	Foundations of Nursing and Clinical	72	48	168	288
VN103	Essentials of Medication Administration	24			24
Totals		**168**	**48**	**168**	**384**
Course Number	Course Title	Lecture Hours	Lab Hours	Clinical Hours	Contact Hours
VN200	Pharmacology I	24			24
VN201	Geriatric Nursing	24			24
VN202	Medical Surgical Nursing I and Clinical	72	34	182	288
Totals		**120**	**34**	**182**	**336**
VN300	Pharmacology II	24			24
VN301	Mental Health Nursing	24			24
VN302	Medical Surgical Nursing II and Clinical	72	24	192	288
Totals		**120**	**24**	**192**	**336**
Course Number	Course Title	Lecture Hours	Lab Hours	Clinical Hours	Contact Hours
VN400	Maternal Child Nursing and Clinical	72	22	38	132
VN401	Vocational Nursing Leadership and Clinical	36	49	83	168
VN402	VN Capstone	36			36
Totals		**144**	**71**	**121**	**336**
	PROGRAM TOTALS	**552**	**177**	**663**	**1392**

Medical Insurance Billing & Coding Specialist [MIS]

SN	**COURSE TOPICS**	**Course Number**	**Lect/ lab/Project Work/total**
	MODULE # 1 [5 Weeks]		
1	Basic Computer in Healthcare Information Technology [HIT]	MIS 101	10/20/00/30
2	Anatomy & Physiology and Pharmacology	MIS 201	30/30/00/60
3	Medical Terminology and Pathology	MIS 202	30/30/00/60

	MODULE # 2 [8 Weeks]		
4	Electronic Medical Records [EMR] Theory	MIS 301	35/45/00/80
5	Electronic Health Records [EHR] Simulations & Case studies	MIS 302	35/45/00/80
6	Principles of Health Insurance Claims, Reimbursement & HIPPA Compliance	MIS 303	80/50/00/130
	MODULE # 3 [6 Weeks]		
7	Medical Billing Theory & Practice Software	MIS 401	40/40/00/80
8	Diagnostic and Procedural Coding and Reimbursement Methodology Outpatient	MIS 402	35/35/00/70
	MODULE # 4 [7 Weeks]		
9	ICD-10-CM/10 PCS Coding and Inpatient Reimbursement Methodology	MIS 501	40/50/00/90
10	Practice Management and Health Data Management	MIS 502	35/25/00/60
11	Career Overview, Job Search & Interview Skills, Resume Writing	MIS 601	10/10/00/20
	Capstone Project	MIS 701	10/00/130/140
	Total		390/380/130/900

The approximate time required to complete MIS is twenty-six (26) weeks. Maximum time allowed for completion of the program is thirty-four (36) weeks.
Mode of delivery will be of 100% online learning through Learning Management System (LMS) to provide audio, visual and conferencing tools as needed.

Dental Assistant

Course #	Title	Lec/Lab/Ext
DA101	Professions of Dental Assistant & Dental Anatomy, Terminology	**[78/18/00/96]**
DA102	Periodontics, Endodontics, Oral and Maxillofacial Surgery	**[10/42/00/52]**
DA 103	Radiation Safety and X-rays	**[77/18/00/95]**
DA104	Infection Control and Sterilization	**[10/44/00/54]**
DA105	Clinical Dentistry, Moisture Control, the Dental Patient, the Dental Examination.	**[79/20/00/99]**
DA106	Impression Materials, and Laboratory Procedures	**[75/22/00/97]**
DA107	The Job Search Resume writing & Mock Interview	**[10/45/00/55]**
DA 108	Externship/Extensive Skills Review Practicum	**[00/00/80/80]**

	TOTAL	**[339/209/80/628]**

The approximate time required to complete Dental Assisting program is Sixteen (16) weeks. Maximum time allowed for completion of the program is Twentyfour (24) weeks.

Vocational English as a Second Language [VESL]

This program has 12 (twelve) courses. Each course is of 91 or 92 contact hours including both

Course		**Hours**		
SLP 101	Speaking, Listening, Pronunciation I: Fundamentals of the English Language.	Lec.	Lab	Total
		65	26	91
GRA 101	Grammar I: Fundamentals of the English Language.	65	27	92
RWV 101	Reading, Writing, and Vocabulary I: Fundamentals of the English Language	65	26	91
Second Quarter				
SLP 102	Speaking, Listening, Pronunciation II: English in Everyday Life	65	27	92
GRA102	Grammar II: English in Everyday Life, Lecture	65	26	91
RWV 102	Reading, Writing, and Vocabulary II: English in Everyday Life	65	27	92
Third Quarter				
SLP 103	Speaking, Listening, Pronunciation III: Understanding Work Culture	65	27	92
GRA 103	Grammar III: Understanding Work Culture.	65	26	91
RWV 103	Reading, Writing, and Vocabulary III: Understanding Work Culture.	65	27	92
Fourth Quarter				
SLP 104	Speaking, Listening, and Pronunciation IV: Contemporary Topics.	65	26	91
GRA104	Grammar IV: Contemporary Topics.	65	27	92
RWV 104	Writing, Reading, Vocabulary IV: Contemporary Topics.	65	26	91
Total		**780**	**318**	**1098**

lectures and credit hours. The total program length is 1098 contact hours. The approximate time required to complete VESL program is Sixteen (16) weeks. Maximum time allowed for completion of the program is twenty-four (24) weeks. Once the program completes and graduation requirements are fulfilled, students will be provided with " Diploma Certificate for

the Completion of VESL"

Mode of delivery will be of 100% online learning through Learning Management System (LMS) to provide audio, visual and conferencing tools as needed.

Surgical and Sterile Processing Technician Program

SN	Course #	Course Title	Lec/lab/Clinicals/Total
1	SsTech 101	Foundation Knowledge & Skills of Sterile Processing	94/8/40/142
2	SsTech 102	Practice of Sterile Processing	167/8/40/215
3	SsTech 103	Sterile Processing Techniques:	171/0/40/211
4	SsTech 104	Surgical Techniques and Role of Surgical Technician	123/32/80/235
5	SsTech 105	Advanced Surgery Techniques SsTech:	400/00/72/472
		TOTAL	**955/32/272/1275**

The approximate time required to complete Surgical and sterile Processing Technician Program is Forty (40) weeks.

Maximum time allowed for completion of the program is Forty-eight (48) weeks.

Students will be awarded a Certificate of Completion in Sterile Processing Technician upon successful completion of the Sterile Processing portion of the curriculum. Once students complete the full curriculum, they will also be awarded the completion certificate of the Surgical Technician program.
Students who enroll in this program and complete only nine hundred (1025) contact hours, but do not complete the required total contact hours or the required clinical hours, will be eligible to receive only the Certificate of Completion in Sterile Processing Technician.

Associate of Applied Science in Information Technology Cyber Security

Table # 1 Table depicting the course inventory for AAS in IT CYBER.

Course Name	Lecture	Tutorial /Lab Activity	Total Clock Hours	Quarter Credit Hours
English Composition I **(ENGL- 101)**	40	20	60	5
Biology I **(BIOL- 101)**	**30**	40	70	5
Introduction to Sociology **(SOCL-101)**	**30**	40	70	5
Chemistry I **(CHEM-101)**	**30**	40	70	5
Biology II **(BIOL-102)**	**30**	40	70	5
Intro to Cyber Security **(ITCS-201)**	40	20	60	5
Networking Security Fundamentals **(ITCS- 202)**	**30**	40	70	5
Cybersecurity and Digital Ethics **(ITCS-301)**	**30**	40	70	5
Introduction to Digital Forensics **(ITCS-302)**	**30**	40	70	5
Firewalls and Network Security Design **(ITCS- 401)**	40	20	60	5
Information Security: Cyber Security **(ITCS-402)**	50	20	70	6
Ethical Hacking and Penetration Testing **(ITCS-501)**	**40**	20	60	5
Incident Response and Malware Analysis **(ITCS- 502)**	40	20	60	5
Cloud and Web Security **(ITCS 503)**	20	40	60	3
Cybersecurity Threat Management **(ITCS-601)**	40	40	80	6
Introduction to Cryptography **(ITCS-602)**	30	20	50	4
IT Project Management **(ITCS- 701)**	40	40	80	6
Cybersecurity Capstone **(ITCS- 702)**	30	40	70	5
Total	**620**	**580**	**1200**	**90**

Associate in Applied Science in Healthcare Information Technology (AASHIT)

Course Name	Lecture	Tutorial/ Lab Activity	Total Clock hr	Quarter Credit hr
ENGL 101 English Composition I	50	20	70	6
BIOL 101 Medical Anatomy and Physiology	10	40	50	3
BIOL 102 Medical terminology	10	40	50	3
SOCL 101 Introduction to Sociology	50	20	70	6
MATH 101 Mathematics	50	20	70	6
HITP 101 The profession and role of Pharmacy Technicians, Drugs & Administration	30	60	90	6
HITP 102 Basic Pharmaceutical Measurements and Calculations	40	40	80	6
HITP 103 Hospital Pharmacy, Prescription	40	40	80	6

Orders and Medication Safety				
HITB 101 Electronic Medical Records [EMR] & Electronic Health Record (EHR) Theory	40	20	60	5
HITP 104 Pharmacology and Dispensing of Drug Coding Reimbursement	50	20	70	6
HITP 105 Pharmaceutical Compounding	30	60	90	6
HIT 101B Insurance Billing - Reimbursement Using Software Technology & HIPPA Compliance	40	40	80	6
HIT102B Medical Billing and Diagnostic and Procedural Coding	40	20	60	5
HITB 103 ICD10CM10PCS Coding and Inpatient Reimbursement Methodology	40	40	80	6
HITT 101 Technology in Healthcare	30	20	50	4
HITT 102 Digital Data Transformation and Health Informatics	20	40	60	4
HITT 103 Foundation of Healthcare Management	20	20	40	3
HITB 106 Capstone	10	40	50	3
Total	600	600	1200	90

The approximate time required to complete AASHIT Program is Thirty-six (36) weeks.
Maximum time allowed for completion of the program is Forty-four (44) weeks.

Sterile Processing Technician

SN	Course #	Course Title	Lec/lab/Clinicals/Total
1	SPTech 101	Foundation of Skills of Sterile Processing [7 Weeks]	[247/16/24/287]
2	SPTech 102	Practice of Sterile Processing [8 weeks]	[248/40/40/328]
3	SPTech 103	Sterile Processing Techniques: [11 weeks]	[298/48/64/410]
		TOTAL [26 weeks]	**[793/104/128/1025]**

The approximate time required to complete Sterile Processing Technician Program is Thirty-six (36) weeks.
Maximum time allowed for completion of the program is Forty-Two (42) weeks.
Students will be awarded a Certificate of Completion in Sterile Processing Technician upon successful completion of the Sterile Processing curriculum

The externship consists of a total of 128 hours, which can be completed with 8 hours biweekly. The Externship Coordinator will contact externs and conduct site visits on an every-other-week basis to evaluate their work. Externs will share their experiences and observations biweekly through virtual meetings or phone communication with the externship coordinator. To support effective learning, externs are encouraged to maintain weekly notes, prepare questions and answers, and may submit a final report on an optional basis. Evaluation will be based on performance on set of skills as outlined in the Externship Monitoring Form attached at the bottom.

EKG/ECG Technician Training Seminar

Subject #	Subject Title	Clock Hours Lec/Lab/Total
EK 101	Introduction, Orientation and Basic concepts	06/00/06
EK 102	Administration of EKG/ECG procedure	14/00/14
EK 103	Operation of EKG/ECG equipment	09/00/09
Total		**29/00/29**

Cardiopulmonary Resuscitation Certification (CPR)

SN	**Course Title**	**Contact Hours: [Lec/lab/Total]**
1	BLS for Adults, Children and Infants, and First Aide	01/02/03
2	Choking Relief for Adults, Children, and Infants	01/01/02
3	Automated External Defibrillator (AED)/ACLS/PALS	01/03/03
	TOTAL	03/05/08

EMR Technician Training Seminar

Subject #	Subject Title	Clock Hours Lec/Lab/Total
EM 101	Introduction, Orientation and Basic concepts	05/00/05
EM 102	Administration of EMR techniques	14/00/14
EM103	Operation of EMR techniques	10/00/10
Total		**29/00/29**

Phlebotomy Technician Training Seminar

Subject #	Subject Title	Clock Hours Lec/Lab/Total
PH 101	Introduction, Orientation and Basic concepts	06/00/06
PH 102	Administration of Medicines related to	14/00/14

	Phlebotomy	
PH 103	Phlebotomy procedure	09/00/09
Total		**29/00/29**

Fundamentals of A & P and Medical Terminology Training Seminar

Subject #	Subject Title	Clock Hours Lec/Lab/Total
AP 101	Introduction, Orientation and Basic concepts	06/00/06
AP 102	Administration of A&P systems and medical terminology	15/00/15
AP 103	Application of medical terminology	08/00/08
Total		**29/00/29**

Nurse Aide Refresher Seminar

SN	Course Title	Contact Hours: [Lec/lab/Total]
1	Personal Care Skills	01 / 02 /0 3
2	Basic Nursing Skills	01 / 02 /0 3
3	Documenting Care	01/01 /02
	Total	03/05/08

Computer Program Refresher (CPR)

SN	**Course Title**	**Contact Hours: [Lec/lab/Total]**
1	Microsoft Office [CPR-1]	02/02/04
2	Computer Basic [CPR-2]	01/02/03
3	Computer Language [CPR-3]	05/15/20
	TOTAL	07/20/27

Health, Nutrition & Wellness, and Weight Loss

Course Title	**Lec/lab/Total**
Body Parts	01/00/01
General lifestyle pattern	02/00/02
Types of Nutrition	02/00/02
Science of Weight loss	03/00/03
Total	**08/00/08**

Physical Therapy Aide (PTA)

Course Title	**Lec/lab/Total**

Medical Terminology	01/01/02
Introduction to Physical Therapy	01/01/02
Medical Disorders, Principal & Safety Issues	05/01/06
Physical Therapy Modalities & Patient Preparation	06/02/08
Total	**13/05/18**

Computerized system validation (CSV)

SN	Course Name	Lecture/lab	Total Contact Hours
1	Introduction to Validation:	02/02	04
2	Introduction to System level risk (SLR)	03/02	05
3	Introduction to System level risk (SLR)	03/02	05
4	Authoring IQ/OQ/PQ/UAT review.	03/02	05
5	Discrepancy, Deviation & CAPA:	03/02	05
6	Validation Summary Report (VSR)	03/02	05
	Total	**17/12**	**29**

General Understanding on Nursing Education System & Technology (GUEST) Seminar

Nursing Program Assessment Refresher	01/04/05
Dental Assistant/ Hygiene Program Refresher	01/01/02
Allied Health Technology Refresher	01/01/02
Total	03/06/09

RN/LVN Nursing Refresher Program

SN	Course Name	Lecture Hr	Lab hr	Clinical hr	Total hrs
LVNRN-101	Orientation Process	5	0	0	5
LVNRN-102	Review of rules & regulations	12	0	0	12
LVNRN-103	Standards of nursing practice	4	0	0	4
LVNRN-104	Systematic approach/nursing process	24	8	32	64
LVNRN-105	Pharmacology review	16	4	12	32
LVNRN-106	Medication Administration	16	4	12	32

LVNRN-105	Documentation	8	0	24	32
Total		**85**	**16**	**80**	**181**

IV Therapy Certification Seminar

Module Number	Description	Lec/lab/Total
Module 1	Anatomy and Physiology	02/00/02
Module 2	Equipment's, Infection, Complications, legal aspects	01/01/02
Module 3	Step by Step Guide	01/01/02
Module 4	Practical Lab	00/02/02
Toal		**04/04/08**

Basic math seminar

Course #	Name of the Course	Lecture/Activities/Total Hours
Course # 1	Fractions and Decimals	02/02/04
Course # 2	Percents and Ratios/Proportions	02/02/04
Course # 3	Metric and Household Measurements/ Clinical Application; Review	02/02/04
	TOTAL	**06/06/12**

COURSE DESCRIPTIONS

Nurse Aide

NA 101: Introduction to Long Term Care (LTC)

Students completing this subject will discuss and be able to detail the history and importance of nurse aides on patient care. They will review the Omnibus Budget Reconciliation Act (OBRA) of 1987 and discuss its impact on improving the quality of life for residents of skilled nursing facilities. Students will be able to state the intent of OBRA and describe the OBRA requirements for Nurse Aide training and placement on the Texas Nurse Assistant Registry. They will discuss who can work as a Nurse Aide and be able to describe the purpose of LTC facilities, the types of residents of LTC facilities, common human needs and myths and feelings about aging. They will be able to describe the role of the Nurse Aide in LTC facilities and safety measures utilized to keep themselves and residents injury free free from any types of accidents including fire safety, biohazards and etc. They will compare and contrast what constitutes appropriate and inappropriate relationships with a residents and how to ensure they always maintain proper relationships with residents. Additionally, they will be able to explain proper procedures in case of accident or incident and proper emergency measures/procedures. They will be able to describe proper infection control

procedures and the rights of residents in LTC facilities. Upon completion of this subject, students will be able to: 1) discuss the Nurse Aide's role as a member of the health care team, 2) recognize and prevent safety hazards, 3) describe safety measures, 4) list emergency measures and care, 5) describe effective infection control measures, 6) identify residents' rights and independence, 7) recall the rules of communication, 8) describe interpersonal skills and 9) discuss taking care of one's self. (Lec 16 Cl Hrs / Lab 00 Cl Hrs / Ext 00 Cl Hrs / Total 16 Cl Hrs) [Prerequisite: None]

NA 102: Personal Care Skills

In this subject, students will learn to use proper body mechanics and positioning when moving and lifting residents to avoid injury to themselves and residents. They will demonstrate skill in positioning and supporting residents in good body alignment in bed, chair and wheelchair. They will be able to state the guidelines and precautions for all of the moving and lifting procedures. Additionally, they will demonstrate various moving and lifting procedures. Students will discuss care of the resident's environment and the importance of respecting the resident's right to privacy and independence. They will discuss why the residents' personal belongings may be so important to them. They will be able to describe and demonstrate assisting residents with bathing, personal hygiene and grooming. Students will also be able to describe the roll of hydration and proper nutrition in maintaining residents' health. Lastly, they will be able to assist residents with bladder and bowel elimination and incontinence. Upon completion of this course, students will be able to: 1) position and move residents using proper body mechanics, 2) discuss care of the resident's environmental surroundings, 3) assist residents with bathing, toileting, perineal care and skin care, 4) discuss residents' hygiene and grooming needs and 5) list the nutritional, hydration and elimination needs of residents. (Lec 08 Cl Hrs / Lab 06 Cl Hrs / Ext 00 Cl Hrs / Total 14 Cl Hrs) [Prerequisite: NA 101: Introduction to Long Term Care (LTC)]

NA 103: Basic Nursing Skills

Students will learn the skills of basic nursing such as 1) promoting a restraint-proper environment, 2) correctly take, record and report vital signs, height and weight, 3) observing, reporting and charting resident condition, 4) nurse aide's role in admission, transfer and discharge of residents and 5) describe coping with death. Upon completion of this subject, students will be able to describe the importance of promoting a restraint-proper environment, when it is appropriate to use restraints, proper use of restraints, dangers of using restraints and the role of the Nurse Aide in avoiding the need for restraints. They will be able to state measures that could be used to avoid the need for restraints. Students will be able to discuss the importance of and be able to demonstrate correctly registering vital signs, height and weight of residents. Additionally, students will be able to explain how their skills of observation, reporting, and charting can lead to better care of residents. They will be able to describe the effects of admission, transfer and discharge on the residents' state of mind and how the Nurse Aide can help a new resident adjust to his or her new surroundings. Lastly, students will learn how to cope with death and how residents cope with their impending death. They will be able to recognize signs of approaching death and explain their role as a Nurse Aide in meeting the emotional needs of a dying resident. (Lec 06 Cl Hrs / Lab 04 Cl

Hrs / Ext 00 Cl Hrs / Total 10 Cl Hrs) [Prerequisite: NA 102: Personal Care Skills]

NA 104: Restorative Services

This subject is devoted to instructing students in how restorative skills promote physical and psychosocial health by allowing residents to attain and maintain the highest possible level of independence and functional ability. Students will discuss the Nurse Aide's role in restoration care. They will learn how to: 1) improve resident self-esteem, 2) use restorative approach in all aspects of care, 3) promote optimal physical and psychosocial wellness, 4) explain procedures and perform them, 5) encourage residents, 6) assist residents to function independently, 7) monitor residents' progress, 8) assist with restorative programs, 9) assist with adaptive and assistive devices, 10 use of prosthetic devices and 11) maintaining range of motion. (Lec 06 Cl Hrs / Lab 00 Cl Hrs / Ext 00 Cl Hrs / Total 06 Cl Hrs) [Prerequisite: NA 103: Basic Nursing Skills]

NA 105: Mental Health and Social Service Needs

During this portion of the program, students will learn about basic human needs. Upon completion of this subject, students will be able to recall and describe the five basic human needs as expressed in Maslow's Hierarchy of Needs. They will be able to describe how meeting higher-level needs requires meeting lower level needs first. They will describe how the unfulfilled needs of a resident may lead to behavioral problems and how cognitive impairment may lead to the resident's perception that his or her needs not being met. Students will also be able to describe developmental tasks of older adults and normal psychological responses to loss and/or change. Upon completion of this subject students will be able to describe: 1) the five basic human needs expressed in Maslow's Hierarchy of Needs, 2) how to meet their own basic needs, 3) how to respond to the residents' appropriate and inappropriate sexual behavior, 4) human needs of the residents, 5) how to assist residents in cultural and religious practices, 6) how to respond to major losses/changes associated with aging, 7) the effects of losses and changes to human needs, 8) developmental tasks of older adults and 9) normal psychological responses to losses/changes. (Lec 05 Cl Hrs / Lab 00 Cl Hrs / Ext 00 Cl Hrs / Total 05 Cl Hrs) [Prerequisite: NA 104: Restorative Services]

NA 106: Social Skills

In this subject, students will discuss and discover how to avoid, recognize and resolve conflict. They will learn that recognizing the potential for conflict is the first step in prevention. Upon completion of this subject, students will be able to recall the five main approaches people use when in conflict with one another: 1) Avoidance, 2) Accommodation, 3) Competition, 4) Collaboration and Compromise. In addition, students will become familiar with the use and benefits of using technology in LTC facilities. They will discuss and be able to describe how the use of technology such as electronic health care records and documentation can improve the resident's care and safety. They will discuss and be able to give examples of appropriate and inappropriate use of social media in the workplace. They will also discuss the consequences of inappropriate use of social media. (Lec 06 Cl Hrs / Lab 00 Cl Hrs / Ext 00 Cl Hrs / Total 06 Cl Hrs) [Prerequisite: NA 105: Mental Health and

Social Service Needs]

NA 107: Nurse Aide Clinical Practice

During this course, students will put into practice knowledge and skills acquired in previous subjects. Side by side with employed staff (all nurses of a long term care facility), students will learn: 1) interpersonal skills with peers in the health field, 2) direct care and communication with residents, 3) how to work under direction and independently and 4) how to take and follow nurse's orders. They will demonstrate: provision of basic care to patients; communication and interaction with patients, family members, and fellow health team members; and assisting patients in attaining and maintaining maximum functional independence, while observing patient rights. They will demonstrate basic first aid procedures, CPR, taking and recording vital signs, applying the elements of basic nutrition in meal planning, and following infection control measures. They will demonstrate proper body mechanics in bed making, lifting, and turning and positioning residents. (Lec 00 Cl Hrs / Lab 00 Cl Hrs / Ext 40 Cl Hrs / Total 40 Cl Hrs) [Prerequisite: NA 106: Social Skills]

Continuing Education for Nurse Aide

CE 101: Introduction to Long Term care

Students completing this subject will discuss and be able to detail the history and importance of nurse aides on patient care. They will review the Omnibus Budget Reconciliation Act (OBRA) of 1987 and discuss its impact on improving the quality of life for residents of skilled nursing facilities. Students will be able to state the intent of OBRA and describe the OBRA requirements for Nurse Aide training and placement on the Texas Nurse Assistant Registry. They will discuss who can work as a Nurse Aide and be able to describe the purpose of LTC facilities, the types of residents of LTC facilities, common human needs and myths and feelings about aging. They will be able to describe the role of the Nurse Aide in LTC facilities and safety measures utilized to keep themselves and residents injury free. They will compare and contrast what constitutes appropriate and inappropriate relationships with a residents and how to ensure they always maintain proper relationships with residents. Additionally, they will be able to explain proper procedures in case of accident or incident and proper emergency measures/procedures. They will be able to describe proper infection control procedures and the rights of residents in LTC facilities. (Lec 02 Cl Hrs / Lab 02 Cl Hrs / Ext 00 Cl Hrs / Total 4 Cl Hrs) [Prerequisite: Certified Nurse Assistant]

CE 102: Personal Care Skills

In this subject, students will learn to use proper body mechanics and positioning when moving and lifting residents to avoid injury to themselves and residents. They will demonstrate skill in positioning and supporting residents in good body alignment in bed, chair and wheelchair. They will be able to state the guidelines and precautions for all of the moving and lifting procedures. Additionally, they will demonstrate various moving and lifting procedures. Students will discuss care of the resident's environment and the importance of respecting the resident's right to privacy and independence. They will discuss why the residents' personal

belongings may be so important to them. They will be able to describe and demonstrate assisting residents with bathing, personal hygiene and grooming. Students will also be able to describe the roll of hydration and proper nutrition in maintaining residents' health. Lastly, they will be able to assist residents with bladder and bowel elimination and incontinence. ((Lec 02 Cl Hrs / Lab 02 Cl Hrs / Ext 00 Cl Hrs / Total 4 Cl Hrs) [Prerequisite: Certified Nurse Assistant]

CE 103: Basic Nursing Skills

Students will learn the skills of basic nursing such as 1) promoting a restraint-proper environment, 2) correctly take, record and report vital signs, height and weight, 3) observing, reporting and charting resident condition, 4) nurse aide's role in admission, transfer and discharge of residents and 5) describe coping with death. Upon completion of this subject, students will be able to describe the importance of promoting a restraint-proper environment, when it is appropriate to use restraints, proper use of restraints, dangers of using restraints and the role of the Nurse Aide in avoiding the need for restraints. They will be able to state measures that could be used to avoid the need for restraints. Students will be able to discuss the importance of and be able to demonstrate correctly registering vital signs, height and weight of residents. Additionally, students will be able to explain how their skills of observation, reporting, and charting can lead to better care of residents. They will be able to describe the effects of admission, transfer and discharge on the residents' state of mind and how the Nurse Aide can help a new resident adjust to his or her new surroundings. Lastly, students will learn how to cope with death and how residents cope with their impending death. They will be able to recognize signs of approaching death and explain their role as a Nurse Aide in meeting the emotional needs of a dying resident. .
((Lec 02 Cl Hrs / Lab 02 Cl Hrs / Ext 00 Cl Hrs / Total 4 Cl Hrs) [Prerequisite: Certified Nurse Assistant]

CE 104: Restorative Services

This subject is devoted to instructing students in how restorative skills promote physical and psychosocial health by allowing residents to attain and maintain the highest possible level of independence and functional ability. Students will discuss the Nurse Aide's role in restoration care. ((Lec 03 Cl Hrs / Lab 01 Cl Hrs / Ext 00 Cl Hrs / Total 4 Cl Hrs) [Prerequisite: Certified Nurse Assistant]

CE 105: Mental Health and Social Service Needs

During this portion of the program, students will learn about basic human needs. Upon completion of this subject, students will be able to recall and describe the five basic human needs as expressed in Maslow's Hierarchy of Needs. They will be able to describe how meeting higher-level needs requires meeting lower level needs first. They will describe how the unfulfilled needs of a resident may lead to behavioral problems and how cognitive impairment may lead to the resident's perception that his or her needs not being met. Students will also be able to describe developmental tasks of older adults and normal psychological

responses to loss and/or change ((Lec 03 Cl Hrs / Lab 01 Cl Hrs / Ext 00 Cl Hrs / Total 4 Cl Hrs) [Prerequisite: Certified Nurse Assistant]

CE 106: Social Skills

In this subject, students will discuss and discover how to avoid, recognize and resolve conflict. They will learn that recognizing the potential for conflict is the first step in prevention ((Lec 04 Cl Hrs / Lab 00 Cl Hrs / Ext 00 Cl Hrs / Total 4 Cl Hrs) [Prerequisite: Certified Nurse Assistant]

Medication Aide

MA 101: Introduction, Orientation and Basic Concepts

Upon completion of this course, students will be able to explain the basic roles and responsibilities of a Medication Aide in relation to the health care team. They will learn safety of patients including emergency health, biohazard, and fire safety. Students will discuss the legal and ethical implications involved in caring for patients. They will recall procedures, according to current rules and regulations, set forth by the Department of Aging and Disability Services for the correct preparation and administration of drugs prescribed by the physician. Students will learn to monitor their patients' normal behavior and prescribed medications, so that they may spot possible drug induced deviations. Students will learn to classify the three categories of drugs, identify drugs from these groups and be able to list the different reasons for giving the medications. They will also be able to describe problems relating to the administration of particular drugs. They will discuss drug legislation and classification of controlled substances. Additionally, students will memorize and be able to identify common medical terminology, symbols and abbreviations. Finally, students will learn to do simple mathematical calculations and conversions of weights and measures as they relate to preparation of medications. (Lec 07 Cl Hrs / Lab 01 Cl Hrs / Ext 00 Cl Hrs /Total Cl Hrs 08) [Prerequisites: None]

MA 102: Administration of Medications

Upon completion of this subject, students will be able to describe the various ways medications are supplied to facilities. They will be able to detail requirements for correct storage and labeling of the medication and their responsibility for its control and accountability. Students will explain how potential errors may occur from supply and storage of medications and will be able to describe procedures for safeguarding medicine from contamination. Students will recount facility policy for medication orders and relate allowable and prohibited practices. They will be able to explain their role and responsibilities in drug therapy. They will demonstrate how to accurately prepare (set up) medications and list the equipment needed. They will demonstrate proper procedures and techniques for administering medications and discuss responsibilities following drug administration. Students will learn how to take vital signs and observe/monitor patients. They will discuss points where potential drug errors or unsafe practices may occur. Students will demonstrate writing an incident report and discuss the follow up if an administration error is made. They will demonstrate correct procedure for

administration of oxygen and be able to follow guidelines for recording medication administration. Students will demonstrate how to complete medical records appropriate to medication administration and discuss protection, access, retention and legal responsibility of medical records. (Lec 19 Cl Hrs / Lab 07 Cl Hrs / Ext 00 Cl Hrs /Total 26 Cl Hrs) [Prerequisite: MA 101: Introduction, Orientation and Basic Concepts]

MA 103: Drugs Affecting the Cardiovascular System

Upon completion of this course, students will be able to classify basic structures of the cardiovascular system and detail their various functions. Students will discuss physiological changes to the cardiovascular system associated with aging. They will be able to identify and describe cardiac disorders and list the drugs used for treatment of each disorder. Students will be able to explain the action of various drugs in treatment and discuss possible side effects that may take place when administered. Students will learn to recognize signs of drug toxicity and be able to describe the steps to be taken to ensure safe administration. They will detail the similarities in appearance and labeling to emphasize the need to read labels closely. They will be able to describe how to measure, prepare and where to apply various ointments and patches. Students will identify the action and main side effect of anticoagulant medication and discuss disease conditions such as peripheral vascular disease, diabetes, etc. They will also learn how to obtain accurate vital signs. (Lec 04 Cl Hrs / Lab 01 Cl Hrs / Ext 00 Cl Hrs / Total 05 Cl Hrs) [Prerequisite: MA 102: Administration of Medications]

MA 104: Drugs Affecting the Urinary System

Upon completion of this subject, students will be able to identify basic structures and functions of the urinary system and describe how aging is associated with changes in those functions. Students will discuss situations requiring the use of diuretics and list the common ones, as well as explain the action associated with their use. They will be able to explain the potential side effects and identify procedures to monitor and observe for complications, and promote comfort for patients. Students will identify reasons for use of potassium replacement drugs. They will discuss the major side effects and identify actions to prevent reactions. Additionally, they will identify drugs that affect bladder tone and review measures to help patients regain bladder control. Finally, students will identify drugs used to treat urinary tract infections, discuss their major side effects and describe measures to promote well-being. (Lec 04 Cl Hrs / Lab 00 Cl Hrs / Ext 00 Cl Hrs / Total 04 Cl Hrs) [Prerequisite: MA 103: Drugs Affecting the Cardiovascular System]

MA 105: Drugs Affecting the Respiratory System

In this subject, students will learn to identify basic structures and functions of the respiratory system and be able to describe changes associated with aging. Students will review the appropriate safety precautions when administering oxygen. They will discuss the different respiratory disorders and list medications used and identify their expected actions, side effects and toxic effects implicated with drug combinations. (Lec 04 Cl Hrs / Lab 01 Cl Hrs / Ext 00 Cl Hrs / Total 05 Cl Hrs) [Prerequisite: MA 104: Drugs Affecting the Urinary System]

MA 106: Drugs Affecting the Digestive System, Vitamins and Minerals
In completing this subject, students will learn to identify basic structures and functions of the digestive system organs and be able to discuss changes associated with aging. Students will be able to name medications used, and describe their actions and possible side effects. They will be able to identify general care measures to prevent and control nausea, vomiting and diarrhea. Students will be able to suggest a non-drug method to help prevent and correct constipation. They will review the four basic food groups and recommend foods that add bulk to diet and explain methods to help maintain good fluid intake. Students also will be able to describe functions vitamins have in the body and determine when supplements are necessary. Finally, they will learn to identify the essential minerals and describe their actions and side effects. (Lec 05 Cl Hrs / Lab 01 Cl Hrs / Ext 00 Cl Hrs / Total 06 Cl Hrs) [Prerequisite: MA 105: Drugs Affecting the Respiratory System]

MA 107: Drugs Affecting the Central Nervous System
Students completing this course are prepared to identify and list the structure and functions of the central nervous system and describe changes consequential to aging. They will learn to identify medications used as cerebral stimulants, antidepressants, analgesics (narcotics, non-narcotics), sedatives, and anticonvulsants, anti-Parkinson agents, psychoactive medications, and then describe their actions, side effects, and discuss implications for care. Students will define and discuss various types of organic brain syndromes and finally discuss the treatment ramifications of drugs used as related to Omnibus Budget Reconciliation Act of 1987 (OBRA 87) and Federal Regulations governing the use of unnecessary drugs and antipsychotic-drugs. (Lec 04 Cl Hrs / Lab 00 Cl Hrs / Ext 00 Cl Hrs / Total 04 Cl Hrs) [Prerequisite: MA 106: Drugs Affecting the Digestive System, Vitamins and Minerals]

MA 108: Drugs Affecting the Musculoskeletal System
Students will acquire skills that will enable them to identify the structures, define functions of musculoskeletal system and explain the effects from aging. They will be able to list drugs used to treat musculoskeletal disorders or diseases, describe their actions, side effects, and state the implications of treatment. (Lec 04 Cl Hrs / Lab 00 Cl Hrs / Ext 00 Cl Hrs / Total 04 Cl Hrs) [Prerequisite: MA 107: Drugs Affecting the Central Nervous System]

MA 109: Drugs Affecting the Endocrine System
Upon completion students will be able describe the structure and function of the endocrine system and the changes associated with aging. They will be able to explain interrelationships of insulin, diet, activity, stress and other disease processes, and be able to describe how the body malfunctions in diabetes and what changes occur. Students will review complications associated with diabetes and discuss measures to help minimize complications. Students will review and demonstrate testing of urine for glucose, ketones, glucometer recording and techniques. Furthermore, they will be able to list drugs used and describe actions, side effects and implications for care. Students will also discuss and be able to recall the medications that medication aides are prohibited from administering. (Lec 07 Cl Hrs / Lab 02 Cl Hrs / Ext 00

Cl Hrs / Total 09 Cl Hrs) [Prerequisite: MA 108: Affecting the Musculoskeletal System]

MA 110: Antibiotics and Other Anti-Infective Agents
Students will discuss the causes of infection, control measures, and signs and symptoms of infections. They will learn to identify topical and systemic anti-infective agents and describe actions that promote effective use. They will discuss and stress their role in observation for adverse side effects and implications of care. (Lec 04 Cl Hrs / Lab 00 Cl Hrs / Ext 00 Cl Hrs / Total 04 Cl Hrs) [Prerequisite: MA 109: Drugs Affecting the Endocrine System]

MA 111: Drugs Affecting the Eye
Students completing this subject will be able to describe the structure and function of the eye and changes associated with aging. They will recognize and recall the Latin abbreviations used. Students will demonstrate procedures and sterile techniques for administration of eye medications. They will learn to identify the action, use and name for eye lubricant. They will be able to identify reasons and give examples of anti-infective drugs that may be used in the eye. (Lec 04 Cl Hrs / Lab 02 Cl Hrs / Ext 00 Cl Hrs / Total 06 Cl Hrs) [Prerequisite: MA 110: Antibiotics and Other Anti-Infective Agents]

MA 112: Drugs Affecting the Ear
Upon completion of this subject, students will be able to describe the structure and function of the ear and changes associated with aging. They will be able to discuss drugs used for ear disorders and review procedures for proper administration of eardrops and ointment. Students will be able to name actions and side effects of drugs affecting the ear and implications for care. (Lec 04 Cl Hrs / Lab 01 Cl Hrs / Ext 00 Cl Hrs / Total 05 Cl Hrs) [Prerequisite: MA 111: Drugs Affecting the Eye]

MA 113: Drugs Affecting the Skin
Upon completion of this subject, students will be able to describe the structure and function of the skin and changes associated with aging. They will learn how to apply medications used to treat different skin disorders and will be able to state precautions for care. Students will review prevention of decubitus ulcers and recall that they may not treat this condition. (Lec 03 Cl Hrs / Lab 02 Cl Hrs / Ext 00 Cl Hrs / Total 05 Cl Hrs) [Prerequisite: MA 112: Drugs Affecting the Ear]

MA 114: Alzheimer's Disease and Related Disorders
Students will review basic disease characteristics and misconceptions of Alzheimer's Disease and discuss the four phases of the disease. They will discuss and be able to describe basic procedures used in dealing with Alzheimer's patients. (Lec 12 Cl Hrs / Lab 00 Cl Hrs / Ext 00 Cl Hrs / Total 12 Cl Hrs) [Prerequisite: MA 113: Drugs Affecting the Skin]

MA 115: Immuno-Compromised Residents
Students will discuss and be able to define the basic characteristics of immuno-compromised residents and describe the drugs available for approved treatment. They will review the

procedures for infection control, explain principles of medical asepsis and discuss state guidelines for handling of AIDS residents. (Lec 04 Cl Hrs / Lab 01 Cl Hrs / Ext 00 Cl Hrs / Total 05 Cl Hrs) [Prerequisite: MA 114: Alzheimer's Disease and Related Disorders]

MA 116: Pediatric Patients
In this subject, students will discuss nutritional considerations and list symptoms of dehydration for pediatric patients. They will be able to explain implications for care and discuss the special health problems of pediatric patients. They will demonstrate different techniques used to administer medication to children. (Lec 07 Cl Hrs / Lab 01 Cl Hrs / Ext 00 Cl Hrs / Total 08 Cl Hrs) [Prerequisite: MA 115: Immuno-Compromised Residents]

MA 117: Care Planning Assistance
Students will discuss the purpose of care planning and be able to explain how their role as a medication aide in the healthcare team is important in patient care planning. (Lec 04 Cl Hrs / Lab 00 Cl Hrs / Ext 00 Cl Hrs / Total 04 Cl Hrs) [Prerequisite: MA 116: Pediatric Patients]

MA 118: Medication Aide Clinical Externship
During Clinical, students will put into practice skills acquired in previous subjects. Under close supervision, students will demonstrate how to take and record vital signs before administering medication. They will communicate and interact with the patients and observe and report to the supervising licensed nurse any reaction or side effect occurring after drug administration. Students will personally set-up the prescribed medications. They will document the administered medication in the resident's clinical record. They will demonstrate procedures for applying vaginal and rectal medication. The student will also administer nasal, ophthalmic and optic medication. They will demonstrate procedures for emergency (only) administration of oxygen per a nasal canula or a non-sealing mask and document the event and their subsequent notification to the licensed nurse on duty. (Lec 00 Cl Hrs / Lab 00 Cl Hrs / Ext 10 Cl Hrs / Total 10 Cl Hrs) [Prerequisite: MA 117: Care Planning Assistance]

MA 119: Return Skills Lab
During this portion of the training students will reinforce the skills learned in previous subjects and practiced during the clinical externship by demonstrating procedures and methods involved with various medication forms and methods of administration. (Lec 00 Cl Hrs / Lab 10 Cl Hrs / Ext 00 Cl Hrs / Total 10 Cl Hrs) [Prerequisite: MA 118: Medication Aide Clinical Externship]

Pharmacy Technician

PT 101: The Profession of Pharmacy, Pharmacy Law, Regulations and Standards for Technicians
[Prerequisite: None]
This subject orients students to the work of pharmacy technicians and the context in which technician's work is performed. Students are introduced to the profound influence that drug

laws standards, and regulations have on pharmacy practice and will learn to abide by those laws, regulations and standards when preparing and dispensing drugs. Upon completion of this subject, students will be able to relate the concept of pharmaceutical care and technician's general role in its delivery. They will be able to discuss the development of new drug products as well as a variety of issues that touch on attitudes, values and beliefs of success for pharmacy technicians. Students will also be able to state the history of federal drug law in chronological order, define the role of the FDA reporting process of adverse reactions and explain the necessary forms and regulations used for controlled substances. Additionally, students will be able to elaborate on the importance of obtaining Pharmacy Technician Certification Board (PTCB) certification and the benefits of active involvement in local, state and national pharmacy organizations. (Lec 10 Cl Hrs / Lab 00 Cl Hrs / Ext 00 Cl Hrs / Total 10 Cl Hrs)

PT 102: Drugs, Dose Forms, Delivery Systems and Routes of Administration

Upon completion of this subject, students will be able to define the term "drug" and distinguish between over-the-counter (OTC) and legend drugs. They will learn to identify the parts of a National Drug Code (NDC) number and; categorize drugs by source. Students will also learn to identify the uses of drugs. Students will be able to define and differentiate between the terms dose form and delivery system and be able to elaborate on the advantages and disadvantages of each. Students will also learn about the various reference texts commonly used in a pharmacy and be able to describe their use and purpose. Students will learn the different routes of drug administration and be able to identify factors that can influence the route of administration; define the terms local use and systemic use; and explain how these uses are considered when a prescriber selects a particular drug for a particular patient. Students completing this subject will be able to list the major routes of drug administration and the advantages and disadvantages associated with each dose form and delivery system; and discuss correct techniques for administration of oral, topical and parenteral dose forms including IV, IM, ID, and subcutaneous forms of drug administration. (Lec 10 Cl Hrs / Lab 00 Cl Hrs / Ext 00 Cl Hrs / Total 10 Cl Hrs) [Prerequisite: PT 101: The Profession of Pharmacy, Pharmacy Law, Regulations and Standards for Technicians]

PT 103: Basic Pharmaceutical Measurements and Calculations

This subject introduces students to the measurement systems used in the pharmacy and calculations they may be required to perform as a Pharmacy Technician. Upon completion of this subject, students will be able to describe the four systems of measurement commonly used in a pharmacy and be able to convert units from one system to another. They will gain an understanding of prefixes used in the metric system and will be able to explain those meanings. They will learn to convert from one metric unit to another; Roman numerals to Arabic numerals and distinguish between proper, improper and compound fractions. Students will perform basic operations with fractions, including finding the least common denominator; converting fractions to decimals; and adding, subtracting, multiplying, and

dividing fractions. They will become very proficient in performing basic operations with proportions, including identifying equivalent ratios and finding an unknown quantity in a proportion, converting percentage to and from fractions and ratios and converting percentage to a decimal. They will perform elementary dose calculations and conversions; solve problems involving powder solutions and dilutions; and learn to use the allegation method. (Lec 100 Cl Hrs / Lab 60 Cl Hrs / Ext 00 Cl Hrs / Total 160 Cl Hrs) [Prerequisite: PT 102: Drugs, Dose Forms, Delivery Systems and Routes of Administration]

PT 104: Medical Anatomy and Physiology

This course is a study of human anatomy and physiology. Lectures systematically take the student from the microscopic level through the formation of organ systems, with emphasis on the interdependence of these systems. Functional concepts and internal structure are related to surface anatomy as a basis for performing a physical examination. The physiology lectures will provide the overall physiology of the human body, but will also relate how that physiology breaks down or malfunctions in time of infection, disease, trauma and aging. Upon completion of this subject students will be able to recall the organ systems of the human body and describe how each system is interdependent on the others. They will be able to describe the aging process and how the physiology breaks down or malfunctions due to infection, disease, trauma and aging. (Lec 30 Cl Hrs / Lab 20 Cl Hrs / Ext 00 Cl Hrs / Total 50 Cl Hrs) [Prerequisite: PT 103: Basic Pharmaceutical Measurements and Calculations]

PT 105: Medical Terminology

This course is a study of the medical vocabulary system specifically for Pharmacy Technicians. It includes structure, recognition, analysis, definition, spelling, pronunciation, and combination of medical terms from prefixes, suffixes, roots and combining forms. Upon completion of this subject students will be able to recognize, pronounce and define medical terms common to the pharmacy practice. (Lec 04 Cl Hrs / Lab 04 Cl Hrs / Ext 00 Cl Hrs / Total 08 Cl Hrs) [Prerequisite: PT 104: Medical Anatomy and Physiology]

PT 106: Pharmacology I

This subject introduces students to prescription medications used in treating diseases of the nervous system and psychiatric disorders. Students learn to distinguish drugs by major classifications, drug actions and reactions and will learn to use drug reference materials normally found in the pharmacy practice. They learn to identify and will be able to describe the use and side effects of prescription medications, nonprescription medications, and alternative therapies commonly used to treat diseases affecting the nervous system and psychiatric disorders. To achieve this they first master an understanding of basic anatomy and physiology of the nervous system. They then learn the therapeutic effects of prescription medications, nonprescription medications, and alternative therapies commonly used to treat diseases affecting the nervous system, including psychiatric disorders and their adverse effects. Students will learn to recall these medications by brand and generic name, standard

pronunciation, and dosage forms, and routes of administration. They will also learn abbreviations and be able to recall the terms associated with use of medication therapy for common diseases affecting the nervous system and psychiatric disorders. This subject is the first in the series of subjects on therapeutic agents. It also introduces students to the role of the FDA in regulation of herbal products and dietary supplements which students will be able to describe once they have completed this subject. (Lec 40 Cl Hrs / Lab 00 Cl Hrs / Ext 00 Cl Hrs / Total 40 Cl Hrs) [Prerequisite: PT 105: Medical Terminology]

PT 107: Dispensing Medication in the Community Pharmacy

This subject introduces students to duties and responsibilities they may encounter in a community pharmacy. They will become proficient in performing and be able to recall typical duties of pharmacy technicians with regard to dispensing of over-the-counter and prescription drugs. They will explain the typical procedures for receiving and reviewing prescriptions; describe the parts of a prescription and of a typical prescription label; describe the parts of a patient profile; and detail the steps required to prepare, check and/or update a patient profile. Students will become familiar with the computer system and will be able to explain the parts of a computer system. They will learn about third party benefit insurance and claims adjudications and will be able to explain each. They will be able to explain the alternatives for third-party administration; define and explain the terms prescription benefits manager and tiered co-pay; and discuss drug coverage for Medicaid and Medicare patients. A coverage of pharmacy inventory will assure comprehension and skill in performing procedures for inventory management, to include purchasing, receiving and storage of prescription and over-the-counter drugs. Students will also become proficient in complying with procedures for the purchasing, receiving, storage and inventory control of controlled-drug substances. They will learn to calculate inventory turnover, markup and markup rate; apply average wholesale price to profit calculations and be able to compute discounts accurately. (Lec 04 Cl Hrs / Lab 04 Cl Hrs / Ext 00 Cl Hrs / Total 8 Cl Hrs) [Prerequisite: PT 106: Pharmacology I]

PT 108: Pharmacology II

This subject familiarizes students with the use and side effects of prescription medications, nonprescription medications, and alternative therapies commonly used to treat diseases affecting the muscular system (bones and joints). To achieve this student will first master basic anatomy and physiology of the muscular system and be able to identify the therapeutic and adverse effects of prescription medications, nonprescription medications, and alternative therapies commonly used to treat diseases affecting the muscular system. Students will learn how to prepare and dispense pharmacologic agents and will be able to discuss drugs according to their classification, trade and generic name, drug action (mechanism), side effects, toxicity and contraindications. For each medication studied, students will be able to recall the brand and generic name, standard pronunciation, dosage forms and routes of administration. They also learn to interpret and use the abbreviations for terms associated with use of medication therapy for common diseases affecting the muscular system. (Lec 40

Cl Hrs / Lab 00 Cl Hrs / Ext 00 Cl Hrs / Total 40 Cl Hrs) [Prerequisites: PT 107: Dispensing Medication in the Community Pharmacy]

PT 109: Medication and Prescription Orders and their calculations

This continuation of basic pharmaceutical measurements and calculations expands on skills previously learned in PT 103. Students will learn how to interpret medication orders and labels, and how to perform calculations of solid oral doses and dosages, liquid oral and parenteral medications and reconstitution of powders and crystals into liquid medications. Upon completion of this subject students will be able to interpret medication orders and calculate solid and liquid medications. They will also be able to reconstitute powders and crystals into liquid medications. (Lec 40 Cl Hrs / Lab 40 Cl Hrs / Ext 00 Cl Hrs / Total 80 Cl Hrs) [Prerequisite: PT 108: Pharmacology II]

PT 110: Extemporaneous Compounding

Students will learn via classroom theory and lab skill sessions what extemporaneous compounding is and when to use it. They will be able to describe common situations in which compounding is required; identify and describe the equipment used for the weighing, measuring and compounding of pharmaceuticals; how to use the proper technique for weighing pharmaceutical ingredients; and use the proper technique for measuring liquid volumes. Students will be able to define the term percentage of error; and explain the common methods used for comminution and blending of pharmaceutical ingredients. They will be able to explain the use of the geometric dilution method and in detail explain the process by which solutions, suspensions, ointments, creams, powders, suppositories and capsules are prepared. (Lec 06 Cl Hrs / Lab 04 Cl Hrs / Ext 00 Cl Hrs / Total 10 Cl Hrs) [Prerequisite: PT 109: Medication and Prescription Orders and their calculations]

PT 111: Hospital Pharmacy Practice, Infection Control and Hospital Calculations

This subject introduces the student to various proficiencies required in an institutional pharmacy practice environment. Upon completion of this course, students will be able to describe the various inpatient drug distribution systems; explain the proper procedure for repackaging of medications; identify the process of medication dispensing; and describe specialty services such as intravenous admixtures and total parenteral nutrition. The institutional pharmacy practice setting is very different from the retail environment. Students will be able to describe the various roles of clinically trained pharmacists in the institution; describe the functions of a drug information center; and discuss the origins and purpose of the institution formulary. They will also be able to discuss the role of automation and inventory control in the institution; describe the classifications and functions of an institution; identify the roles of major institution committees; and list common universal precautions to protect institution employees. Students will learn about the germ theory of disease— the role of pathogenic organisms in causing disease. Students will learn to distinguish various viruses, bacteria, fungi and protozoa; and will be able to discuss the advantages and disadvantages of

various forms of sterilization. They will be able to identify sources and prevention of common causes of contamination; describe proper aseptic techniques, including the use of horizontal and vertical laminar airflow hoods; and discuss the new United States Pharmacopeia requirements. Students will be able to discuss the importance of and techniques for handling and disposing hazardous agents. They will also learn how to do special medication calculations commonly used in institutions. Upon completion of this subject, students will be able to calculate medications for special populations based on body weight and patient age. They will also learn to calculate dosages for medications measured in percent of concentration, milliequivalents and units. Additionally, they will learn to do calculations of mixtures from institutional stock medications and how to interpret physicians' orders for dosages. (Lec 20 Cl Hrs / Lab 20 Cl Hrs / Ext 00 Cl Hrs / Total 40 Cl Hrs) [Prerequisite: PT 110: Extemporaneous Compounding]

PT 112: Preparing Sterile Intravenous Products

This course exposes students to the characteristics of intravenous solutions including solubility, osmolality and pH. They will learn to identify common vehicles for intravenous solutions, describe the equipment and procedures used in preparing parenterals and identify the components of an intravenous administration set. Students will learn how to perform intravenous admixture specific calculations such as converting from Fahrenheit to Centigrade and vice versa; calculating the molecular weight and milliequivalents of certain substances used in the pharmacy; computing the specific gravity of liquids and calculating intravenous rates and administration. (Lec 10 Cl Hrs / Lab 10 Cl Hrs / Ext 00 Cl Hrs / Total 20 Cl Hrs) [Prerequisite: PT 111: Hospital Pharmacy Practice, Infection Control and Hospital Calculations]

PT 113: Pharmacology III

Students learn the use and side effects of prescription medications, nonprescription medications, and alternative therapies commonly used to treat diseases of the Respiratory, Gastrointestinal, Renal and Circulatory systems. To achieve this they must first master an understanding of basic anatomy and physiology of the these systems and be able to identify the therapeutic and adverse effects of prescription medications, nonprescription medications, and alternative therapies commonly used to treat diseases affecting them. Students will learn how to prepare and dispense pharmacologic agents and will be able to discuss drugs according to their classification, trade and generic name, drug action (mechanism), side effects, toxicity and contraindications. For each medication studied, students will be able to recall the brand and generic name, standard pronunciation, dosage forms and routes of administration. They also learn to interpret and use the abbreviations for terms associated with use of medication therapy for common diseases affecting the Respiratory, Gastrointestinal, Renal and Circulatory systems. (Lec 40 Cl Hrs / Lab 20 Cl Hrs / Ext 00 Cl Hrs / Total 60 Cl Hrs) [Prerequisites: PT 112: Preparing Sterile Intravenous Products]

PT 114: Medication Safety

This subject provides Students with an appreciation for medication safety by learning the extent and possible effects of medication errors on patient health and safety. Students will gain an appreciation for medication safety by learning the extent and possible effects of medication errors on patient health and safety. They will be able to describe how and to what degree medication errors contribute to medical errors; list examples of medication errors commonly seen in the practice settings; apply a systematic evaluation of opportunities for medication error to a pharmacy practice model; and identify the common reporting systems available for reporting medication errors. (Lec 40 Cl Hrs / Lab 24 Cl Hrs / Ext 00 Cl Hrs / Total 64 Cl Hrs) [Prerequisites: PT 113: Pharmacology III]

PT 115: Role of Pharmacy Technician, Health Insurance billing and Employment Strategies

This course provides the students with an introduction to medical insurance as it pertains to the job of the pharmacy technician. The students will focus on three key aspects of insurance billing - knowledge of procedures, health information technology skills, and communication skills. Furthermore, this course will cover the role of the pharmacy technician as a member of the customer care team in a pharmacy that may include emergency health, biohazard and safety. Students will learn to use verbal and non-verbal communication skills in dealing with customers and coworkers. They will be able to define discrimination and harassment and explain the proper procedures for dealing with these issues. Students will discuss the importance of protecting patient privacy in the pharmacy. Students will also be able to elaborate on Morals and Ethics and their role in decisions made by technicians in fulfilling their duties. Students will be able to explain the difference between a pharmacist's and a technician's roles; list who can prescribe medications, and describe the implications of the new Health Insurance Portability and Accountability Act. Upon completion, students will be able to state the primary rule of retail merchandising, and explain its corollaries; provide guidelines for proper use of the telephone in a pharmacy; and explain the appropriate responses to rude behavior on the part of others in a workplace situation. They will also be able to explain legal liabilities of pharmacists and technicians. (Lec 10 Cl Hrs / Lab 05 Cl Hrs / Ext 00 Cl Hrs / Total 15 Cl Hrs) [Prerequisite: PT 114: Medication Safety]

PT 116: Pharmacy Technician Extensive Lab/ Externship

During the clinical portion of training, students will put into practice skills they have gained during their classroom training. They will refine their customer service skills, assist fellow workers in filling prescription orders; input insurance information; assists customers; maintain inventory control, and develop an effective career success strategy similar to retail pharmacy under the supervising pharmacists of retail or hospital pharmacy or in the CTK lab. Students will be evaluated using the CTK Healthcare and Career Institute Pharmacy Technician Externship Monitoring Form. Upon completion of their clinical rotation students will be fully qualified in all areas identified on the monitoring form. (Lec 00 Cl Hrs / Lab 00 Cl Hrs / Ext 180 Cl Hrs / Total 180 Cl Hrs) [Prerequisites: PT 115: Role of Pharmacy

Technician, Health Insurance Billing and Employment Strategies]

PT 117: PTCB Exam Preparation

This subject provides students with an intensive review for the pharmacy technician examination given by the Pharmacy Technician Certification Board (PTCB). It encompasses everything learned to date in Pharmacy Technician Training, as well as thorough review, discussions, questions & answers and memorization of the Top 200 drugs, their pharmacological class, indications and schedule, as well as brand and generic names. The competency will be evaluated through Exit Exam. Upon completion of this subject, students will be fully prepared to sit for the PTCB certification examination. (Lec 85 Cl Hrs / Lab 20 Cl Hrs / Ext 00 Cl Hrs / Total 105 Cl Hrs) [Prerequisites: PT 116: Pharmacy Technician Clinical Externship.

Patient Care Technician

PHIT 200-1: Technology in Health Care [Part I] Prerequisite, None
It introduces the students the use of personal computer technology. Students will learn various programs of Microsoft office - Microsoft word, Excel, Access, Power point, email, iCloud, outlook, and Provides opportunities for practical applications of computer skills to care patient. [Lec 30 Cl Hrs / Lab 15 Cl Hrs / Ext 00 Cl Hrs / Total 55 Cl Hrs]

PHIT 200-2: Technology in Health Care [Part II] Prerequisite, PHIT 200-1
It includes the concepts of software applicable to health care that includes Electronic Medical Record (EMR) System. This course introduces basic features of selected software, terminology related to hardware, software and uses for patience. Students will learn about how to communicate as an effective partner in a healthcare team, managing patient-specific data to protect patient confidentiality and privacy, and teaches the skills to navigate an electronic health record system to protect the confidentially work in a variety of healthcare settings. [Lec 30 Cl Hrs / Lab 15 Cl Hrs / Ext 00 Cl Hrs / Total 65 Cl Hrs]
PBIS 300-1: Principle, Scope and Role of Patient Care Technician: Prerequisite, NA 100-7
This subject introduces the learner about the profession and Job responsibility of a patience care technician, including policy, procedure such as HIPAA Policy Manual, Client Grievance Policy – Patient Care Manual, Confidentiality of Clients and Client Records – Patient Care Manual, emergency health including Biohazards, and Fire Safety policy. Students will learn the rights of each patient and is committed to ensuring the protection of those rights in its provision of care, treatment and services; the procedure to post the patient right in a language comfortable to read and visible to the patience. The students will learn about the types of information they can gather from the patience including the proper documentation, filing and hand over procedures in addition to ethics, safety, and various types of conflict. Students will identify the various types of risk in the profession and way to avoid them. [Lec 12 Cl Hrs / Lab 00 / Ext or SLE 00 hrs/ Total 20]
PPNC 300-2: **Pre-Professional and Professional Nursing Concepts**. Prereq, PBIS 300-1

The course includes the introduction to the nursing profession including, standards of practice, legal and ethical issues, and role of the patient care technicians. Topics include mental health, therapeutic communication, cultural and spiritual diversity, and holistic awareness. Upon completion of this course, the students will able to discuss the personal adjustments essential to the development of the patient care technician, identify the role of the patient care technicians and discuss the legal and ethical responsibilities for their job. [Lec 15 Cl Hrs / Lab 10 / Ext 00 hrs/ Total 25]

PNSP 300-3: Nursing and Medication Pathways: Prerequisite; PHIT 200-2.
Introduces students the Pathway to various certificate and degrees in Nursing Program. Students will learn the role of various types of Nurses in healthcare discipline, safety and quality improvement. Introduces nursing as a profession including roles and responsibilities, essential knowledge, skills, interpersonal communication abilities critical to the nurse patient relationship and attitudes required to be a professional nurse.
[Lec 100 Cl Hrs / Lab 10 Cl Hrs / Ext 00 Cl Hrs / Total 130 Cl Hrs]

HHA 300-4: Home Health Aid Prerequisite, PPNC 300-2
The course describes qualities and characteristics of HHA, infection control along household environments and applications for precautions procedure for prevention. Additionally, the students will learn the house keeping tasks, safety hazards, dietary and meal planning, personal care and safety, record keeping and reporting. Students will be introduced with communication skills in healthcare professions [Lec 10 Cl Hrs / Lab 5 Cl Hrs / Ext 00 Hrs / Total 20 Hrs]

PAAP 400-1: Anatomy & Physiology for Allied Health: Prerequisite, PNSP 300-1
This course is a study of human anatomy and physiology. Student will go from the microscopic level through the formation of organ systems, with emphasis on the interdependence of these systems. Functional concepts and internal structure are related to surface anatomy as a basis for performing a physical examination. The students will learn overall physiology of the human body, and how that physiology breaks down or malfunctions in time of infection, disease, trauma and aging. Upon completion of this subject students will be able to recall the organ systems of the human body and describe how each system is interdependent on the others. They will be able to describe the aging process and how the physiology breaks down or malfunctions due to infection, disease, trauma and aging.
[Lab 30 Cl Hrs / lab 20 Cl Hrs / Ext 00 Cl Hrs/ Total 60 Cl hrs]

PMET 500-1: Medical Terminology: PAAP 400-1 Prerequisite: None
This course is a study of the medical vocabulary system specifically for Pharmacy Technicians. It includes structure, recognition, analysis, definition, spelling, pronunciation, and combination of medical terms from prefixes, suffixes, roots and combining forms. Upon completion of this subject students will be able to recognize, pronounce and define medical terms common to the entry level Patient care.[Lec 10 Cl Hrs / Lab 5 Cl Hrs / Ext 00 Cl Hrs / Total 15 Cl Hrs]

PCPR 600-1: Cardio Pulmonary Recitation: Prerequisite; PAAP 400-1
Students will be able to learn the concept and procedures of CPR. They will be able to demonstrate both CPR and First Aid for an emergency situation on infant, child and adult. It meets the requirements for American Heart Association Basic Life Support (BLS) for those in Health Care and other professional areas. in this course, the materials presented are the basic patient assessment, basic airway management, rescue breathing, AED use, and Choking management. [Lec 20 Cl Hrs / Lab 10 Cl Hrs / Ext 00 Cl Hrs / Total 30 Cl Hrs]

PEKG 600-2: Basic Electro Cardiography: Prerequisite: PCPR 600-1
Students will learn to interpret EKG strips, anatomy & physiology of the heart, using three-lead monitoring as a guide. Students learn to perform basic electrocardiography procedures; and interpret basic dysrhythmias. Total 53 Cl Hrs. [Lec 10/Lab 50/Ext 00/Total650]

PEKG 600-3: Advanced Electro Cardiography: Prerequisite: PEKG 600-1
Students will demonstrate skills in performing cardiac stress testing for patient preparation, correct lead placement, patient assessment, vital signs, and necessary intervention by the cardiac technician, if needed. [Lec 30/Lab 10/Ext o 00/Total 50]

PHEL 700-1: Introduction to Phlebotomy Procedures: Prerequisite: PNSP 300-3, and PAAP 400-1
This course briefly explain phlebotomy and professional profile of health professionals who perform phlebotomy procedures including their importance to the overall care of the patient. Student will learn skills including active listening, verbal communication, and phlebotomy services for routine performance. They will also learn how a phlebotomist can participate in improving activities. Through the course, they will be able to apply the basic ethics, legal terms, functions of the medical record and informed consent. Litigation as relates to blood collection and procedure to avoid. Identification of key elements of the health insurance portability and accountability Act (HIPAA). [Lec 10/Lab 05/Ext 00/Total 15 hrs]
PHEL 700-2: Terminology & functions of Body system related to Phlebotomy.
Prerequisite PHEL 800-1
Student will learn Physiology and pathology of cardiac system, directional terms, anatomic surface regions and cavities of the body. Students will learn the role of homeostasis in normal body functioning including the purpose, function, and structural components of the 11 body systems, disorders associated with each organ system and list of common diagnostic tests associated with each organ system; identification and description of structures and functions of the heart, trace the flow of blood through the cardiovascular system; identification and description of structures and functions of different types of blood vessels; identification and description of cellular and non-cellular components of blood, location and name of the veins most commonly used for phlebotomy procedures. [Lec 10/Lab 05/Ext 00/Total 15 hrs]

PHEL 800-1: Fundamentals of Disease. Prerequisites PAAP 400-1

This course is designed to provide general principles of diseases and major disorder affecting

the human body systems. The students will assess the common symptoms and signs in the lab and during the internship. The course includes topics on major diseases related to most of the human body system. Upon the completion of this courses student will be able to learn the mechanism of diseases, diagnostic process, cure and infectious process. In addition, students will be able to explain signs and symptoms, diagnostic procedures and treatments for the major diseases. [Lec 30/Lab 10/Ext 00/Total 40 hrs]

PHEL800-2: Infection, Process and Control techniques. Prerequisite PHEL 800-1
Student will learn the terms of health-care acquired (nosocomial) infection- by identifying the basic programs for infection control with explanation on the proper techniques for hand washing, gowning, gloving, masking, double bagging, entering and exiting the various isolation areas, Identify the potential routes of infection and methods for preventing transmission of microorganisms through these routes, identify steps to avoid transmission of blood borne pathogens and describe the various isolation procedures and reasons for their use. It describe safety awareness for health care workers, explain the safety policies and procedures for specimen collection including the measures that should be taken for fire, electrical, radiation, mechanical safety in a health care facility, and the essential elements of a disaster emergency plan for a health care facility. It explains the safest way of using equipment in health care facilities and also the best ways of reducing risk of injury to patients. [Lec 30 Cl Hrs/Lab 30 Cl Hrs/ Ext 00 Cl Hrs/ Total 80 Cl hrs.]

PHEL800-3- Clinical Theory in Safety and Confidentiality. Prerequisites PHEL800-2
Student will learn the basic components and uses of medical records, acceptable guideline for maintaining privacy and confidentiality, essential elements of requisition and report forms and will also learn the proper method of transporting specimen. It describes various types of anticoagulants used in blood collection, their mechanism for preventing blood from clotting, and the vacuum collection tube colour codes for these anticoagulant. Description of the latest phlebotomy safety supplies and equipment, their effectiveness in blood collection, supplies that should be carried on a specimen collection tray when a skin puncture specimen collected and also type of safety equipment needed to collect blood by venepuncture. Furthermore, it describes the special precautions that should be taken and the techniques that should be used when various types of specimens must be transported to the clinical laboratory. [Lec 20 Cl Hrs/Lab 00 Cl Hrs/ Ext 00 Cl Hrs/ Total 25 Cl hrs]

PHEL900-1:Venipuncture: Prerequisite PHEL800-3
Student will learn; patient identification process, supplies used in a typical venipuncture procedure, hygiene, appropriate sites for venipuncture and situations when these sites might not be acceptable and identify alternative sites for the venipuncture procedure, the process and time limit for applying a tourniquet to a patients arm, the decontamination process and the agents used decontaminate skin for routine blood tests and blood cultures, steps of a venipuncture procedure, order of drawing for collection tubes, explain the importance of collecting timed specimens at the requested times. It explains the term FASTING and STAT when referring to blood tests, explain the reason for acquiring capillary blood specimen, and identify the proper sites for performing a skin puncture procedure. It explains ways to control

the depth of the incision, describing the procedure for making a blood smear, including to explain why capillary blood from a skin puncture is different from blood taken by venipuncture. [Lec 10 Cl Hrs/Lab 10 Cl Hrs/ Ext 00 Cl Hrs/ Total 25 Cl Hrs]

PHEL900-2: Types of Phlebotomy Practices: Prerequisites, PHEL900-1
Students will be able to describe pre-analytical complications related to phlebotomy procedure and also explain how to prevent and or handle complications in blood collection, list at least five factors about a patient's physical disposition that can affect blood collection. It will also list examples of substances that can interfere in clinical analysis of blood constitution and describe methods used to prevent these interferences. This course can describe fears or concerns that children in different developmental stages might have towards the blood collection process, able to list suggestions that might be appropriate for parental and health care workers behaviour during venepuncture or skin puncture. Identification of puncture sites for a heel stick on an infant and describe the procedure, can describe the venepuncture sites for infants and young children, including to describe the types of equipment and supplies that must be used during micro collection and venepuncture of infants and children. This course further details the procedure for specimen collection for neonatal phenylketonuria (PKU} and metabolic screening. [Lec 10 Cl Hrs/Lab 05 Cl Hrs/ Ext 00 Cl Hrs/ Total 20 Cl Hrs]

PHEL900-3: Specimen Collection & Use of Equipment Lab I. Prerequisite, PHEL 900-2
Student will be able to explain the special precaution and types of equipment needed to collect capillary or arterial blood gases, describe the equipment that is used to perform the bleeding time test, discuss the requirements for the glucose and lactose tolerance test, differentiate cannulas from fistulas, list the steps and equipment in blood culture collections, list the special requirement for collecting blood through intravenous {IV}catheters. It explains the difference therapeutic phlebotomy from autologous transfusion, the special precautions needed to collect blood in therapeutic drug monitoring {TDM} procedures, list the types of patient specimen that are need for trace metal analyses, list terms that are synonymous with point-of-care testing, able to define five physical and / or emotional changes that are associated with the aging process. Describe how a health care worker should react to physical and emotional changes associated with the elderly ,able to identify four analytes whose levels can be determined through point-of-care testing, and to describe the most widely used application of point-of-care testing, quality assurance and its requirements. [Lec 10 Cl Hrs/Lab 10 Cl Hrs/ Ext 00 Cl Hrs/ Total 25 Cl Hrs]

PHEL900-4: Specimen Collection and Urinalysis Lab II, Prerequisite, PHEL 900-3
Student will be able to describe the body fluid specimens other than blood that are analysed in the clinical laboratory; explain the types of specimen, correct procedures for collecting and or transporting these specimens to the laboratory for microbiological, throat and nasopharyngeal culture, and the protocol that must be followed when transporting these specimens. It lists specimens that are needed for gastric analyses, types of urine specimen collections and differentiate the uses of the urine specimens obtained from these collections. It further define toxicology and forensic toxicology with examples of specimens that can be used for forensic

analysis. Describe the role of the health care worker or collector in federal drug testing programs, describe the function of a chain of custody, and examples of situations where drug testing might be valuable. It describe the detection of adulteration of urine specimens. [Lec 10 Cl Hrs/Lab 10 Cl Hrs/ Ext 00 Cl Hrs/ Total 25 Cl Hrs]

SLE-101: Skills & License Exam Review
In this course students will review the various lab skills, perform enough practice to master on the skills to get ready in the job market after completion of this course. Students can complete extensive lab training either in CTK lab or outside clinic and hospitals. Furthermore, students will thoroughly review the license Exam practice & review questions to master the knowledge and skills required to attempt and possibly to pass the license Exam. Prerequisite: All [Lec 100 Hrs/Lab 00 Cl Hrs/ Ext 120 Hrs/ Total: 220 Cl Hrs]

Medical Assisting Program

[MS 101] Medical Office Study
Prerequisite: None

Students will learn the fundamentals of worktypes in a medical office, including the types of equipment that are used in a medical office. [Lec/Lab/Ext/Total: 010/00/10/20]

[MS 201] Medical Office Management I

Prerequisite: [MS 101]

This course describes the best practices of medical office management including staffing, policy making, scheduling and issues of various types of equipment needed to run the medical office.

[Lec/Lab/Ext/Total: 20/04/06/30]

[MS 202] Medical Office Management II- Mastering Medical Language

Prerequisite: [MS 201]

This course teaches the way to pluralize medical terminologies that has been extensively used in medical field. Furthermore, it identifies the common medical slang, jargon, and common foreign terms. [Lec/Lab/Ext/Total: 20/10/10/40]

[MS 301] Medical Insurance, Law and Ethics

Prerequisite: None

Students will learn to fill out insurance paperwork, for not only the insurance compa nies, but also for Medicare and government insurance forms and be able to reclaim and

Investigate any amounts that are not reimbursed to the doctor's office. Students will learn to process insurance paperwork including claim forms and reimbursement procedure for various insurances policies. [Lec/Lab/Ext/Total: 20/06/04/30]

[MA 101] Medical Terminology and Professional Development

Prerequisite: None

This course will introduce students to complex language of medicine associated with medical language. An individual pursuing career in healthcare profession must understand the structure of medical language, suffixes, root words and medical abbreviation. By the completion of the course, students will be able to spell, analyze, pronounce and define medical terms and standard abbreviations. Along with new vocabulary, students will be introduced to the professional standards of the healthcare environment. [Lec/Lab/Ext/Total: 20/05/00/25]

[MA 201] Vital Signs & Documentation of Medical Histories

Prerequisite: AP401

Students will learn to demonstrate the measurement of vital signs to include temperature, Respirations,pulse and blood pressure. Students will also learn to document these findings acco rdingly into the patients chart. [Lec/Lab/Ext/Total: 10/05/00/15]

[MA 301] Medical Office Manager Procedures I

Prerequisite: [MS 201]

Students will learn to assimilate the patient information as it is acquired form the patient. Students will also be able to communicate with the patient enter the data that is attained from the patient into the permanent record of the patient in medical software Electronic Healthcare Record. It also teaches how to manage phone call, day to day activities of medical office. [Lec/Lab/Ext/Total: 10/05/05/20]

[MA 302] Medical Office Manager Procedures II

Prerequisite: MA301

Students will learn to demonstrate the skills acquired to use Electronic Health Record[EHR] system and to assimilate the information from the patient. [Lec/Lab/Ext/Total: 15/05/05/25]

[PH 101] Basic Pharmacology

Prerequisite: None

This subject orients students to the work of pharmacy technicians and the context in which technician's work is performed. Students are introduced to the profound influence that drug laws standards, and regulations have on pharmacy practice and will learn to abide by those laws, regulations and standards when preparing and dispensing drugs. Upon completion of this subject, students will be able to relate the concept of pharmaceutical care and technician's general role in its delivery. They will be able to discuss the development of new drug products as well as a variety of issues that touch on attitudes, values and beliefs of success. Students will also be able to state the history of federal drug law in chronological order, define the role of the FDA reporting process of adverse reactions and explain the necessary forms and regulations used for controlled substances. [Lec/Lab/Ext/Total: 15/05/00/20]

[AP 101] Basic Anatomy and Physiology

Prerequisite: None

This course is a study of human anatomy and physiology. Lectures systematically take the student from the microscopic level through the formation of organ systems, with emphasis on the interdependence of these systems. Functional concepts and internal structure are related to surface anatomy as a basis for performing a physical examination. The physiology lectures will provide the overall physiology of the human body, but will also relate how that physiology breaks down or malfunctions in time of infection, disease, trauma and aging. Upon completion of this subject students will be able to recall the organ systems of the human body and describe how each system is interdependent on the others. They will be able to describe the aging process and how the physiology breaks down or malfunctions due to infection, disease, trauma and aging. [Lec/Lab/Ext/Total: 20/10/00/30]

[CB-601] Computer Basics [EMR]

Prerequisite: None

Students will learn skills to work on a computer in the doctor's office, hospital and laboratory a nd to refine this skill to input information gathered from patient in computer soft wares including Microsoft Office Word and Excel. This course provides an introduction to the parts of the medical office computer system – maintaining, inputting, filing, retrieving and storing medical records, setting up an appointment matrix, scheduling appointments, managing the appointment schedule, making appointments for diagnostic procedures and admissions. Students also learn how to look up diagnostic and procedure codes and identify different types of insurance plans as well as methods of reimbursement for medical services. This course will include out-of-class work such as: reading and writing assignments, practice and practical application assignments, and projects. A few hours out-of-class work will be assigned.

[Lec/Lab/Ext/Total: 15/05/00/20]

[MC 601] Coding for Medical procedures

Prerequisite: [CB 601]

During this course, students will explore the fundamentals of paper and electronic record management, fee determination, billing methodology, and collection process. Students will be able to perform basic bookkeeping, coding, and third-party billing procedure. Students will be introduced to various medical insurance plans, terminology and legal regulations along with financial management of medical office.

This course also describes the roles and responsibilities of medical coders and medical billers. It also describes the basics of the ICD-10-CM diagnostic classification system, including its history, current purposes, and future implications including the basics of ICD-10-CM, CPT®, and HCPCS procedural classification systems, including their history, current purposes, and future implications on healthcare finance in the United States. Furthermore, it teaches to recognize ICD-10-CM diagnosis codes and use code reference books to verify their appropriate use and to recognize ICD-10-PCS, CPT®, and HCPCS procedure codes and use code reference books to verify their appropriate use. [Lec/Lab/Ext/Total: 30/20/50/100]

[MC 701] Medical Billing/Office Software

Prerequisite: [MC 601]

This course is designed to build fundaments of insurance and billing information along with introduction of ICD-10 manual for diagnostic coding and CPT. Student will learn proper procedures for coding on all aspects like Office visit, disease diagnoses, signs and symptoms, investigations, medical Intervention, treatment, drugs. The course also introduces about CPT and HCPCS. [Lec/Lab/Ext/Total: 00/50/00/50]

[MC 801] CPT Coding

Prerequisite: [MC 701]

The course describes the coding rules and procedures for the CPT by converting descriptions of medical procedures into numerical codes to provide a uniform language to identify medical, surgical, and diagnostic services. [Lec/Lab/Ext/Total: 50/50/00/100]

[MC 901] ICD-10 Coding

Prerequisite: [MC 801]

The course introduces the criteria of the conversions of descriptions of diagnosis into numerical 3,4, and 5 digit and alphabetical codes to provide uniform language to identify etiology, site, and manifestations of disease. [Lec/Lab/Ext/Total: 50/50/00/100]

[PHEL 101] Introduction to Phlebotomy Types and Procedures

Prerequisite:[PNSP 300-1, PAAP 400-1]

This course briefly explains phlebotomy and professional profile of health professionals who perform phlebotomy procedures including their importance to the overall care of the patient. It list skills for active listening and effective verbal communication including the examples of positive and negative body language. It explains health care setting of phlebotomy service for routine performance. It also explains examples of how a phlebotomist can participate improvement activities, basic ethics, legal terms, functions of the medical record and informed consent. Litigation as relates to blood collection and procedure to avoid. Identification of key elements of the health insurance portability and accountability Act (HIPAA) in relation with phlebotomy works.

This course will also be able to describe pre-analytical complications related to phlebotomy procedure and also explain how to prevent and or handle complications in blood collection, list at least five factors about a patient's physical disposition that can affect blood collection. It will also list examples of substances that can interfere in clinical analysis of blood constitution and describe methods used to prevent these interferences. This course can describe fears or concerns that children in different developmental stages might have towards the blood collection process, able to list suggestions that might be appropriate for parental and health care workers behaviour during venepuncture or skin puncture. Identification of puncture sites for a heel stick on an infant and describe the procedure, can describe the venepuncture sites for infants and young children, including to describe the types of equipment and supplies that must be used during micro collection and venepuncture of infants and children. This course further details the procedure for specimen collection for neonatal phenylketonuria [PKU] and metabolic screening. [Lec/Lab/Ext/Total: 15/05/10/30]

[PHEL 201] Infection, Process and Control techniques

Prerequisite: [PHEL 101]

This course defines the terms of health-care acquired (nosocomial) infection- Identifying the

basic programs for infection control, explain the proper techniques for hand washing, gowning, gloving, masking, double bagging, entering and exiting the various isolation areas, Identify the potential routes of infection and methods for preventing transmission of microorganisms through these routes, identify steps to avoid transmission of blood borne pathogens and describe the various isolation procedures and reasons for their use. It describes safety awareness for health care workers, explain the safety policies and procedures for specimen collection including the measures that should be taken for fire, electrical, radiation, mechanical safety in a health care facility, and the essential elements of a disaster emergency plan for a health care facility. It explains the safest way of using equipment in health care facilities and also the best ways of reducing risk of injury to patients. [Lec/Lab/Ext/Total: 10/05/20/35]

[PHEL 301] Clinical Theory in Safety and Confidentiality

Prerequisite: [PHEL 201

This course describes the basic components and uses of medical records, acceptable guideline for maintaining privacy and confidentiality, essential elements of requisition and report forms and will also learn the proper method of transporting specimen. It describes various types of anticoagulants used in blood collection, their mechanism for preventing blood from clotting, and the vacuum collection tube colour codes for these anticoagulants. Description of the latest phlebotomy safety supplies and equipment, their effectiveness in blood collection, supplies that should be carried on a specimen collection tray when a skin puncture specimen collected and also type of safety equipment needed to collect blood by venepuncture. Furthermore, it describes the special precautions that should be taken and the techniques that should be used when various types of specimens must be transported to the clinical laboratory.
[Lec/Lab/Ext/Total: 08/02/00/10]

[PHEL 401] Venipuncture

Prerequisite: [PHEL 301]

This course explains the following: patient identification process, supplies used in a typical venepuncture procedure, hygiene, appropriate sites for venepuncture and situations when these sites might not be acceptable and identify alternative sites for the venepuncture procedure, the process and time limit for applying a tourniquet to a patients arm, the decontamination process and the agents used decontaminate skin for routine blood tests and blood cultures, steps of a venepuncture procedure, order of drawing for collection tubes, explain the importance of collecting timed specimens at the requested times. It explains the term FASTING and STAT

when referring to blood tests, explain the reason for acquiring capillary blood specimen, and identify the proper sites for performing a skin puncture procedure. It explains ways to control the depth of the incision, describing the procedure for making a blood smear, including to explain why capillary blood from a skin puncture is different from blood taken by venepuncture.
[Lec/Lab/Ext/Total: 10/06/05/21]

[PHEL 501] Specimen Collection & Use of Equipment Lab

Prerequisite: [PHEL 401]
This course explains the special precaution and types of equipment needed to collect capillary or arterial blood gases, describe the equipment that is used to perform the bleeding time test, discuss the requirements for the glucose and lactose tolerance test, differentiate cannulas from fistulas, list the steps and equipment in blood culture collections, list the special requirement for collecting blood through intravenous {IV} catheters. It explains the difference therapeutic phlebotomy from autologous transfusion, the special precautions needed to collect blood in therapeutic drug monitoring {TDM} procedures, list the types of patient specimen that are need for trace metal analyses, list terms that are synonymous with point-of-care testing, able to define five physical and / or emotional changes that are associated with the aging process. Describe how a health care worker should react to physical and emotional changes associated with the elderly ,able to identify four analytes whose levels can be determined through point-of-care testing, and to describe the most widely used application of point-of- care testing, quality assurance and its requirements.
Additionally, this course describes the body fluid specimens other than blood that are analysed in the clinical laboratory. It explains the types of specimen, correct procedures for collecting and or transporting these specimens to the laboratory for microbiological, throat and nasopharyngeal culture, and the protocol that must be followed when transporting these specimens. It lists specimens that are needed for gastric analyses, types of urine specimen collections and differentiate the uses of the urine specimens obtained from these collections. It further define toxicology and forensic toxicology with examples of specimens that can be used for forensic analysis. Describe the role of the health care worker or collector in federal drug testing programs, describe the function of a chain of custody, and examples of situations where drug testing might be valuable. It describe the detection of adulteration of urine specimens.
[Lec/Lab/Ext/Total: 15/05/15/35]

[MC 1101] Medications & Dosage Calculations and Basic Pharmacology

Prerequisite: None

Students will learn to accurately calculate the dosages of medications using a patient's weight, Age, height and on occasion body mass. The student will learn to identify and know the uses of each medication and reaction to medications.

This subject also orients students to the work of pharmacy technicians and the context in which technician's work is performed. Students are introduced to the profound influence that drug laws standards, and regulations have on pharmacy practice and will learn to abide by those laws, regulations and standards when preparing and dispensing drugs. Upon completion of this subject, students will be able to relate the concept of pharmaceutical care and technician's general role in its delivery. They will be able to discuss the development of new drug products as well as a variety of issues that touch on attitudes, values and beliefs of success. Students will also be able to state the history of federal drug law in chronological order, define the role of the FDA reporting process of adverse reactions and explain the necessary forms and regulations used for controlled substances. [Lec/Lab/Skill/Total: 10/10/04/24]

[MC 1201] Skills Review

Prerequisite: All subjects previously noted that apply to Medical Assistant

This course provides the opportunity for the students to review the skills learned including Billing & Coding software provided by CTK healthcare & Career Institute, under the supervision of the professionals working in any discipline of Medical facility or guidance from the instructor at CTK lab. Students will master on the marketable skills to operate and analyze the Medical software including patient portal, EHR and Insurance Billing and Coding with other related medical skills, which aims to use them effectively in the healthcare industry on the job.. [Lec/Lab/Skill/Total: 00/00/70/70]

[LMP 101] Certification Review, Exam Preparation & Licensing

Prerequisite: All subjects previously noted that apply to Medical Assistant

This course is designed to prepare students for the licensure exam. Students will revise and practice the questionnaires related to the courses they did. [Lec/Lab/Ext/Total: 50/00/00/50]

EKG technician training seminar

EK 101: Introduction, orientation and Basic concepts
This seminar course is a study of functioning of heart movement through EKG/ECG recording basic concepts and procedure. This seminar systematically take the student from the basic knowledge on components of EKG/ECG to monitoring electrical activity of heart muscles with emphasis on the interdependence of these systems. Functional concepts and electrical depolarization of heart muscle cells are related to heart activity as a basis for performing a graphical examination of heart activities. The EKG/ECG lectures will provide the overall heart's electrical activity recorded from the electrodes placed in body surface. Upon completion of this seminar, students will be able to review the magnitude and direction of the heart's electrical rhythm including changes in the normal heart activities pattern occur during numerous cardiac abnormalities, including cardiac rhythm disturbances, inadequate coronary artery blood flow, and electrolyte disturbances. They will be able to review the description of the different components to an EKG/ECG (P wave, QRS complex, and T wave). Additionally, they will be able to review for interpretation the records generated by EKG/ECG machines. (Lec 06 hours.)

EK 102: Administration of EKG/ECG procedure
Upon completion of this seminars, students will be able to describe the various ways to monitor heart electrical activities. They will be able to be prepare for longer or more specialized monitoring of patient's heart activities. They will be able to follow the procedure to prepare patients for the record of heart activities including body surface cleaning for the placement of pads, connection of electrodes via electrical leads (wires) to the EKG machines. Upon completion of this course, student will be able to administer the proper position of the patients for the EKG/ ECG records which include Stress test, Holter monitor, Event recorder. (Lec 14 hours)

EK 103: Operation of EKG/ECG equipment
PT 103 seminar is designed to focus on operation of EKG/ECG machines. They will be able to learn to connect or disconnect the electrodes to body surface and electrodes wire to the EKG/ECG machines. Student will learn to place adhesive electrode pads across the chest and limbs. They will be able to label and attach the insulated wires/lead to each of the ten electrodes. They will be able to push the EKG/ECG bottom to generate the heart movement in graphical patterns. Finally, they will be able to verify and print the copy for the chart. (Lec 9 hours.)

Structured Query language, Business Intelligent Developer & Java Analyst [SQL BI & Java

SID-101: Introduction
Students will learn about the Data system and Analytics. Furthermore, they will be introduced the commonly used tools such as Sequel (SQL), Python, Tableau, and key concepts around

Statistics. Student will be able to differentiate between Data Analyst, BI Developer, and Data Scientist role. Student will be able to explore the potential job opportunities in Data and Analytics.

SID-102 Basic Sequel

This course focuses on introduction to Structured Query Language (SQL), database management system concepts, and Entity Relationships (ER) Relational model concepts in a database system. Students will be able to execute queries against a database and retrieve data from a database. They will learn various operations such as JOIN, UNIONS using SQL and they will be able to execute mathematical functions such as min, max, count, average and sum using SQL. They will also learn how to filter records using Where, Greater, Equal and Less than operators. Oracle and/or SQL server will be used as a tool for this course.

SID-103: Advanced Sequel

Students will learn how to Create, Insert, Update, and delete records from a database. The course prepares student on how to write Subqueries and the Stored Procedures. The topic of Database Normalization and SQL Tractions will be discussed in the course. Students will be able to execute advance Mathematical functions, like expressions using SQL. Prerequisite: **SID-102**

SID-104 SQL Performance

The course covers creating Temp Table, apply CTE, query optimization and execution strategies, concurrency control, locking, deadlocks, security, and backup/recovery concepts. Non-relational databases are also briefly introduced. Students will use Oracle and/or SQL Server to design and create a database using SQL as their project. Prerequisite: **SID-103**

SID-201: BI and Architecture & ETL & Others

This course will cover data warehouse and data mart lifecycle phases as well as business intelligence approaches while focusing on architecture, infrastructure, design, implementation, and management issues. Topics include differences between data warehouses and traditional database systems (OLTP), data modeling, planning for data warehouses, extraction transformation and loading (ETL), Students will also learn about how to create Pivot tables and chart using Excel.

SID- 202: Power BI

The course provides an introduction to concepts and techniques used in field of data analytics and visualization. Topics covered in the course include predictive analytics, pattern discovery, and best practices for creating effective data visualizations. Through practical application of the above topics, students will also develop proficiency in using analytics tools. Tool used in this course is Power BI and or Tableau.

SID 203: Power BI Advanced

The course introduces data ingestion and data wrangling process using Power BI. Students will learn to connect Data Warehouse and Power BI. Students will learn how to visualize data and share insights to business. The course will enable student to effectively communicate using visualization techniques. The course will help student to explore the functionality of Power BI and or Tableau. Prerequisite: **SID-202**

SID 301: Service

This course will provide the foundation of various securities roles, Apps and workspace. They will learn how to create Dashboard and reports from the data. Student will learn how to schedule this process and add row level security on these Dashboards and reports.

SID-401: Analytics with Python

Student will learn foundation-level of skills and knowledge in Python and libraries to perform Analytics tasks. They will learn about Pandas, Numpy, Sci-kit Learn, Seaborn and other libraries and get familiarities with these libraries. This course will help student to familiarize with version controlling tool such as GitHub, and Cloud computing services such as AWS and Microsoft Azure. Student will choose a publicly available data and apply these packages and perform data analysis and prepare slides to share the insights. Anaconda will be used as a tool for this course.

SID-501: Advance Analytics with Python with R and JAVA

Student will learn foundation-level of skills and knowledge on Data Exploration and Analysis. Basic concepts of Statistics will be discussed, and students will be able to analyze large data sets and Analytics tasks. Student will choose a publicly available data and apply these packages from previous course and perform data analysis and prepare slides to share the insights. RStudio and Python will be used as a tool for this course.

Student will learn the foundation level of skills and knowledge with Java (core-Java) and selenium framework with curriculum for analysis and automation testing.

Prerequisite: **[SID-401]**

SID-601: Capstone Project

Student will apply all the concepts that are taught in previous courses and then analyze the Data on a team of 2 or 3 members. They will choose publicly available data and then present their findings at the end of course. This will help student on their communication and presentation skills. Prerequisite: **[SID 501]**

SID-701: Job Search Skills

Student will learn how to create resume and present themselves for a job interview. Students will learn about Data exercise that is being used by various companies. Student will learn about the expectations of Data Analyst and BI Developer from a real industry experience person.

Computer Basics training seminar

1. **Microsoft Office[CB 101]:** This course introduces components of Microsoft office such as Microsoft word, Excel and Power point. [03Lec/12Lab/15Total]

- **Microsoft Word:** This course teaches how to format the typed document that may

include to use various command for making it customized as needed and to make an official document. It includes saving the created document in various format. Furthermore, it teaches how to attach the document in an email. Proficient in the use of **personal computer** technology.

- **Microsoft Excel:** This course teaches the student to develop spreadsheet developed by Microsoft for Windows, macOS, Android, iOS and iPadOS. This technique also features calculation or computation capabilities, graphing tools, and a macro programming language called Visual Basic for Applications.
- **Microsoft Power Point:** This course teaches Microsoft PowerPoint, from its creation, customization, and display in projector, including emailing to other parties.

2. **Computer Basic [CB 102]: This course orient s**tudents about all the major concepts of operating system. Students will have basic understanding about how to prepare resumes, interviewing techniques, and search out job. [02Lec/12lab/14Total]

EMR technician training seminar

EM 101: Introduction, Orientation and Basic concepts

This course is designed to review excellent EMR training and carrier preparation for growing health care industry. The EMR includes medical history, diagnoses, medications, immunizations and dates, allergies etc. This seminar systematically takes the student from the basic skill of coding manuals and how they apply to insurance with emphasis on the interdependence of these systems. This course will prepare students to review to speak appropriate language for a solid understanding of medical terminology. Using practice management software, EMR courses help to create records and scheduling appointments. They will be able to learn ethics and legal issue, medical terminology, dividing and combining medical terms, medical abbreviations, symbols, and special terms. In addition, the students will be able to perform coding for the EMR specialist, they will be able to use Practice Management Software to generate patient's census data. (Lec 04 hours.)

EM 102: Administration of EMR Techniques

Upon completion of this seminars, students will be able to review medical records of the patients. They will be able to manage the healthcare practice responsible for all records throughout their lifecycle. They will be able to follow the procedure to release or transfer information in a timely manner without duplication efforts. They will review how to link medical records management systems with patient management systems, billing, and other systems. Upon completion of this course, student will be able to generate digital version of a paper chart for the healthcare professionals to use mainly for diagnosis and treatments. (Lec 10 hours)

EM 103: Operation of EKG/ECG equipment

EM 103 seminar is designed to focus on operation of EMR software, sharing medical records upon the request of patient, and electronically capturing of health information in a standardized format. They will be able to learn to manage medical records including patient

charts, X-ray, images, scans, and even emails. They will be able to make sure all of these items are accessible, safe and secure. (Lec 6 hours.)

Phlebotomy technician training seminar

PH 101: Introduction, Orientation and Basic concepts
This course is designed to prepare students with theory and laboratories related to various techniques to perform blood collection, labelling, and transporting specimens required to diagnosis and care of patients. Seminars systematically take the student from the basic knowledge on Phlebotomy with emphasis on the interdependence of these systems. This course offers programs covering healthcare settings, medical terminology, basics of human anatomy, clinical chemistry, microbiology and immunology, blood collection procedures emphasizing methods for infection. The course will be focused on the fundamentals of laboratory procedures with some life venipunctures practice under the supervision in a controlled setting. Student will learn quality control and safety procedure, blood collection procedures and techniques, uranalysis specimen collection and drug testing, capillary blood drawing procedure (Lec 06 hours.).

PH 102: Administration of Phlebotomy procedure
Upon completion of this seminars, students will be able to describe the various techniques to draw blood samples, method to specimen collection and drug testing for urinalysis. They will be prepared for capillary blood draw using vacuum collection. The course offers student to be familiar with syringes, capillary skin puncture techniques, and butterfly needles. Upon completion of this course, student will be primarily learn to administer the proper techniques for venipuncture and blood sample preparation. (Lec 14 hours)

PH 103: Operation of Phlebotomy tools/equipment

PH 103 seminar is designed to focus on operation of tools and equipment related to collection of blood samples using syringes and other equipment. They will be able to process blood samples. In addition, they will learn safety measure while drawing the blood and collecting specimen for. (Lec 09 hours.)

Fundamentals of A & P and Medical Terminology Training Seminar

AP 101 Introduction, orientation, and Basic concepts
This course is designed to review the basic knowledge of human anatomy and physiology. The course reviews concepts of the structure and function of the human biology including cells, tissues and organs of the different human biological systems including integumentary, skeletal, muscular, nervous and special senses. The course emphasizes on interrelationships among the systems, coordination of physiological functions involved in maintain homeostasis. In addition, the course provides an overview of medical languages. During this seminar, student will

emphasize on the temps that are practical and commonly used in the day-to-day work with medical professionals. They will understand basic principles of the languages with an overview of various terms of many medicinal areas. (Lec 06 hours.)

AP 102 Administration of A&P systems and medical terminology

Students will be able to overview the essential principles of human anatomy and physiology. Student will be familiarized with learning resources of different human body systems. This course is a review of the medical vocabulary system specifically for Pharmacy Technicians. It includes structure, recognition, analysis, definition, spelling, pronunciation, and combination of medical terms from prefixes, suffixes, roots and combining forms. Upon completion of this subject students will be able to review to recognize, pronounce and define medical terms common to the pharmacy practice. (Lec 15 hours.)

AP 103 Application of medical terminology

This course will allow students to terminology for effective communication. The students will be able to review condition, medicine, or procedure to fulfill their roles accordingly either in delivering or billing for a medicine. Upon completion of this seminar course students will be able to review for communication effectively by using scribble common abbreviations. (Lec 8 hours.)

Computer Program Refresher (CPR)

Microsoft Office[CPR-1]: This course introduces components of Microsoft office such as Microsoft word, Excel and Power point.

A. Microsoft Word This course teaches how to format the typed document that may include to use various command for making it customized as needed and to make an official document. It includes saving the created document in various format. Furthermore, it teaches how to attach the document in an email. Proficient in the use of **personal computer** technology.

1. Intro to Office 360
2. Intro to MS WORD and the application
3. How to save Word Documents in various formats such as word, .pdf
4. Formatting word document based on given requirements/use cases
    a. Font, Font size, Indenting, Cover page, Page number
    b. Type of font, spacing, lay out
5. Insert Table, Charts, Pictures into the word document from Excel
6. Create different types of documents such as Resume, essay writing, poster presentation

B. Microsoft Excel: This course teaches the student to develop spreadsheet developed by Microsoft for Windows, macOS, Android, iOS and iPadOS. This technique also features calculation or computation capabilities, graphing tools, and a macro programming language called Visual Basic for Applications.

- Intro to Office 360
- Intro to MS EXCEL and the application
- How to save Excel in various formats such as .xls, .csv

- How to write the formula for the mathematical operations
- Creating tables, Charts, to visualize data
- Insert Table, Charts, Pictures to and from the word document
- How to create Pivot Tables, and summarize the data
- Import data from various sources into the excel sheet
- How to create multiple sheets within the excel doc

C. Microsoft Power Point : This course teaches Microsoft PowerPoint, from its creation, customization, and display in projector, including emailing to other parties.

- Intro to Office 360
- Intro to MS Power Point and the application
- How to save Powerpoint in various formats
- How to Create slides and add contents in the slide
- Adding tables, Charts, to visualize data
- Inserting Table, Charts, Pictures to and from the word document/excel sheets
- Formatting charts, tables and contents based on requirements
- Formating slides based on the contents
- How to create meaningful slides for the meaningful discussions

1. **Computer Basic [CPR -2]]:** This course orient students about all the major concepts of operating system. Students will have basic understanding about how to prepare resumes, interviewing techniques, and search out job.

- Intro to Operating Systems
    - Windows vs MAC vs Linux
    - Installing softwares in various operating environments
    - Resume Preparations for various jobs
        - Resumes for various professions
        - Entry level vs Experienced
        - Translating jobs requirements into resume
        - How to write effective resumes
    - Job search
        - Platforms such as Indeed, Linkedin, Career Builder, Zip Recruiter, Career websites
    - Linkedin Profiles

2. **Computer Languages [CPR-3];** This course is a comprehensive suudy where students will engage about Microsoft Azure, AWS , ETL Data Integration, and Analytics with R (R Studio), Analytics with Python, Integrating Power BI with R and Python, Power Automate (Flow) Power Apps

Course Descriptions

Licensure Vocational Nursing (LVN)

COURSE TITLE: VN 100 Basic Anatomy and Physiology

CO-REQUISITES: VN101; VN102; VN103

COURSE DESCRIPTION:

In this course students will learn about the structure and function of the human body. Students will develop knowledge about the levels of organization, cells and tissues, and the digestive, musculoskeletal, respiratory, cardiovascular, reproductive, urinary, endocrine, gastrointestinal, integumentary, lymphatic, sensory and nervous systems.

COURSE TITLE: VN 101 Vocational Roles

CO-REQUISITES: VN100; VN102; VN103

COURSE DESCRIPTION:

In this course students will learn about the field of vocational nursing, including information on nursing history, ethics, and death and dying. Students will also learn about the laws regulating the practice of nursing, confidentiality, and patient rights. Finally, students will develop skills regarding growth and development through the lifespan, cultural sensitivity, communication, and spiritual needs of patients.

COURSE TITLE: VN 102 Foundations of Nursing and Clinical

CO-REQUISITES: VN100; VN101; VN103

COURSE DESCRIPTION:

In this course students will learn about the fundamentals in nursing knowledge and skills necessary to maintain physiological and psychosocial integrity. The student will attain a foundation for the more advanced skills and knowledge as they progress through the vocational nursing program. Students will gain an understanding of man as a biopsychosocial being with basic human needs. Students are introduced to the nursing process and will gain knowledge of safety and asepsis, medical terminology, communication, vital signs measurement, basic body mechanics, admission, transfer and discharge of patients. Experiences in basic patient care will include, but is not limited to, bed bath, feeding, personal hygiene, elimination, and introduction to oxygenation. The student is introduced to health promotion along with documentation, and basic first aid. The student will also gain awareness of the patient's needs along with health maintenance/promotion. Clinical practice is provided at various long-term care facilities. Classroom, laboratory, and clinical experience are provided concurrently.

COURSE TITLE: VN 103 Essentials of Medication Administration

CO-REQUISITES: VN100; VN101; VN102

COURSE DESCRIPTION:

In this course students will develop the ability to accurately calculate dosage in order to administer medications safely and effectively. Students will review basic math skills including numbers, fractions, decimals, and whole numbers. The metric, apothecary and household conversion systems are learned, as well as ratio and proportion, formula and dimensional analysis methods to calculate dosage problems. Students will gain practice in reading medication labels, understanding and interpreting medication orders, medication administration records, drug distribution systems, and calculating oral,

parenteral, and intravenous medications. Calculation of reconstituted solutions, intravenous solutions, insulin, heparin, critical care and pediatric and adult dosages based on weight is also included.

COURSE TITLE: VN 200 Pharmacology I

CO-REQUISITES: VN201; VN202 COURSE DESCRIPTION:

In this course students will acquire the ability to understand the legal implications of drug administration and to gain specific knowledge as to the vocational nurses' responsibility in administering medication. Students will gain an understanding of commonly used drug classifications, actions, and adverse effects. Students will apply the nursing process to medication administration, promoting and monitoring therapeutic effects, observing patients and minimizing the adverse effects of drugs, and evaluating the drug's effectiveness. Instruction on the following drug groups are included in this course: pulmonary; cardiovascular; immunological and gastrointestinal.

COURSE TITLE: VN 201 Geriatric Nursing

CO-REQUISITES: VN200; VN202 COURSE DESCRIPTION:

In this course students will learn about holistic nursing care of the older adult. Students will explore physiological changes of aging, cognitive disorders, medication administration, safety, nutrition, assessment, psychosocial needs and common health issues of the geriatric population.

COURSE TITLE: VN 202 Medical Surgical Nursing I and Clinical CO-

REQUISITES: VN200; VN201

COURSE DESCRIPTION:

In this course students will learn about nursing care related to adult patients with common disorders of the cardiovascular, immune, hematologic and lymphatic, respiratory, gastrointestinal, hepatic and pancreatic systems and care of the surgical patient. Students will have clinical practice at various hospitals or skilled nursing units within long- term care facilities. Classroom, laboratory, and clinical experience are provided concurrently.

COURSE TITLE: VN 300 Pharmacology II

CO-REQUISITES: VN301; VN302

COURSE DESCRIPTION:

This course continues the instruction from Pharmacology I related to commonly used drug groups. Students will gain an understanding of drug groups, to include: integumentary; musculoskeletal; nervous; eye and ear; endocrine; reproductive and urinary; and vitamins, minerals, herbs and complementary and alternative medicines. Students will learn about drug actions and adverse effects and apply the nursing process to medication administration, promoting and monitoring therapeutic effects, observing patients and minimizing the adverse effects of drugs, and evaluating the drug's

effectiveness.

COURSE TITLE: VN 301 Mental Health Nursing

CO-REQUISITES: VN300; VN302

COURSE DESCRIPTION:

In this course students will learn about basic mental health concepts. An understanding of the theory of stress and adaptation as well as principles of mental health and illness, abnormal behaviors, stress and anxiety, therapeutic communication, nursing care of patients with common psychiatric disorders and addictive personalities will be achieved. Additionally, students learn about identifying psychological, social and cultural issues that may affect patients and families.

COURSE TITLE: VN 302 Medical Surgical Nursing II and Clinical

CO-REQUISITES: VN300; VN301

COURSE DESCRIPTION:

This course is a continuation of Medical-Surgical Nursing I and Clinical with application of the nursing process to the care of the adult patient experiencing common disorders of the urinary, endocrine, genitourinary and reproductive, musculoskeletal, neurologic, sensory, and integumentary systems. Students will have clinical practice at various hospitals, rehabilitation centers and skilled nursing units within long-term care facilities. Classroom, laboratory, and clinical experience are provided concurrently.

COURSE TITLE: VN 400 Maternal Child Nursing and Clinical

CO-REQUISITES: VN401; VN402

COURSE DESCRIPTION:

In this course students will learn about nursing care related to the normal process and common disorders of the antepartum, intrapartum, and postpartum periods and the newborn. Nursing care related to normal growth and development from infancy through adolescence and common disorders of childhood are also explored. Clinical practice sites may include hospitals, outpatient care settings such as clinics and doctor's offices, and daycares. Classroom, laboratory, and clinical experience are provided concurrently.

COURSE TITLE: VN 401 Vocational Nursing Leadership and Clinical

CO-REQUISITES: VN400; VN402

COURSE DESCRIPTION:

This course of study allows students to learn to utilize nursing leadership and management skills through the practice of team nursing and primary care. An understanding of health care financing, issues and trends, Nurse Practice Act, Standards of Nursing Practice, Unprofessional Conduct Rules, Delegation Rules and personal career development is acquired. Students will have clinical practice at various long-term care facilities. Classroom and clinical experience are provided concurrently.

COURSE TITLE: VN 402 Vocational Nursing Capstone

CO-REQUISITES: VN400; VN401

COURSE DESCRIPTION:

This course provides the student with a review of key content from the vocational nursing program. Students will identify areas of content mastery and weakness so they can develop a study plan for success on the licensure examination. The process for taking the licensure examination and applying for a Texas nursing license is presented.

Medical Insurance Billing & Coding Specialist [MIS]

Course Descriptions

Basic Computers in Healthcare Information Technology [HIT] [MIS -101]: This course is designed to teaches students about the basic information about the computer application which includes Microsoft office and Basic operating system. Furthermore, it introduces the use of computer to create, edit, saving and customize word document, attachment of a document, screen shares, screen shot and to create PowerPoint slides. It also teaches the basic computer operating system and to implement professional computing and careers including email system such as outlook and use of Excel for billing matters. Subject Hours [Lec/lab/Proj/Total; 10/20/00/30]; Prerequisite : None

Anatomy & Physiology, and Pharmacology [MIS-201]:
This course is a study of human anatomy and physiology. Lectures systematically take the student from the microscopic level through the formation of organ systems, with emphasis on the interdependence of these systems. Functional concepts and internal structure are related to surface anatomy as a basis for performing a physical examination. The physiology lectures will provide the overall physiology of the human body, but will also relate how that physiology breaks down or malfunctions in time of infection, disease, trauma and aging. Upon completion of this subject students will be able to recall the organ systems of the human body and describe how each system is interdependent on the others. Furthermore, It introduces students to prescription medications used in treating diseases of the various systems and disorders. Students learn to distinguish drugs by major classifications, drug actions and reactions and will learn to use drug reference materials normally found in the pharmacy practice. They learn to

identify and will be able to describe the use and side effects of prescription medications, nonprescription medications

Prerequisites: None. Subject Hours: [Lec/lab/Proj/Total; 30/30/00/60]

Medical Terminology, and Pathology [MIS-202]

This course is a study of the language and nomenclature of medical vocabulary system. It includes structure, recognition, analysis, definition, spelling, pronunciation, and combination of medical terms from prefixes, suffixes, roots and combining forms. Upon completion of this subject students will be able to recognize, pronounce and define medical terms common to the pharmacy practice. It further introduces students to the language and nomenclature of medicine via study of the structure, meaning, and use of medical terms related to diseases, operations, and the human body. Furthermore, It continues the study of human diseases, the processes that cause disease, and ways in which disease signals signs symptoms, including physical and laboratory findings. They will be able to describe the aging process and how the physiology breaks down or malfunctions due to infection, disease, trauma and aging. Prerequisites: None [30/30/00/60]

Electronic Medical Records [EMR] Theory: MIS- 301

It includes the concepts of software applicable to health care that includes Electronic Medical Record (EMR) System. This course introduces basic features of selected software, terminology related to hardware, software and uses for patience. Students will learn about how to communicate as an effective partner in a healthcare team, managing patient-specific data to protect patient confidentiality and privacy, and teaches the skills to navigate an electronic health record system to protect the confidentially work in a variety of healthcare settings. Prerequisites: None [40/40/00/80]

Electronic Health Records[EHR] Simulations & Case studies: MIS- 302

This class teaches the Effective electronic health record (EHR)-based training interventions through simulation which emphasizes learning actual tasks through experimentation in a risk-free environment without negative patient outcomes. This training is used to improve EHR use to enhance the healthcare providers' skills and behaviors. It further studies case by case documents related to an increase in adverse patient safety issues due to the EHR-user interface.

Prerequisites: MIS-301[35/45/00/80]

Principles of Health Insurance Claims, Reimbursements & HIPPA compliance :MIS -303

Students will learn to fill out insurance paperwork, for insurance companies, Medicare and government insurance forms and be able to reclaim and Investigate any amounts that are not reimbursed to the doctor's office. Students will learn to process insurance paperwork including claim forms and reimbursement procedure for various insurances policies. They will be able to Investigate any amounts that are not reimbursed to the doctor's office. It teaches the Health Insurance Portability and Accountability Act (HIPAA), privacy policy and the commitments of healthcare employee and entities to the level of privacy protection. It further teaches the compliance with regulation to provide the patient with adequate privacy protection, in the context of the United States of America. Prerequisite: None; [Lec/lab/Proj/Total: [80/50/00/130]

Medical Billing Theory & Practice MIS- 401

Upon completion of this course, the student will have an advanced working knowledge of how to use various billing software programs and identify the basic elements of insurance plans. This course also identifies elements of the revenue cycle, as it relates to inpatient and outpatient reimbursement, insurance procedures and Medicare regulations. The focus is on disease and procedural coding for the IPPS, DRG, APC and UHDDS definitions, guidelines, conventions and correct sequencing for optimal reimbursement. Prerequisite; None; [40/40/00/80]

Diagnostic and Procedural Coding and Reimbursement Methodology Outpatient MIS - 402

This teaches students the theory and practice of medical coding for professional services, procedures and supplies using CPT (Current Procedure Terminology) and Healthcare Common Procedure Coding System (HCPCS) Level II system and modifiers. Furthermore, students will apply coding conventions and guidelines and follow instructional notes for professional provider evaluation and management & surgical cases. In addition to radiology, laboratory and anesthesia reports, outpatient medical records and scenarios will be utilized to access student knowledge and ability to apply NCCI edits. Prerequisites: MIS-401, [35/35/00/70]

ICD-10-CM/10PCS Coding and Inpatient Reimbursement Methodology: MIS -501

It also describes the basics of the ICD-10-CM diagnostic classification system, including its history, current purposes, and future implications including the basics of ICD-10-CM, current purposes, and future implications on healthcare finance in the United States. Furthermore, it teaches to recognize ICD-10-CM diagnosis codes and use code reference books to verify their appropriate use and to recognize ICD-10-PCS. Moreover, this course teaches the student to demonstrate the use of ICD-10- CM/10PCS book and CPT book. This further demonstrate how to code different procedures and diagnoses related to body systems; demonstrate how to use different modifiers, demonstrate how to code Evaluation and Management, Anesthesia, Pathology and Laboratory, Radiology and Medicine; also demonstrate proper procedures for reimbursement methodologies and coding for medical necessity. Prerequisite; None; Clock Hours: [40/50/00/90]

Practice Management and Health Data Management MIS- 502

It teaches the Fundamental components of this course that not only includes introduction of the medical administrative professional but also to integrate electronic health records systems into professional practice. Furthermore, the student will receive instruction in medical office accounting, revenue cycle management techniques, evaluating the practice assets, human resource management, developing office policy, business ethics, and legal requirements

necessary for establishing and maintaining the medical practice for a viable business. Prerequisite; MIS-501; [Lec/Lab/Proj:35/25/00/60]

Career Overview, Job Search & Interview Skills, and Resume Writing; MIS-601

This course will provide students with effective job search strategies in MIS. Through lectures, interactive group activities including Discussion Board, students will learn about diverse strategies to obtain employment under various title of MIS per company policy. Serious emphasis will be placed on resume and cover letter writing to develop career portfolio, networking, interviewing techniques. After successfully completing this course, students will be able to articulate personal strengths, values and interests as it relates to their personal and professional development, accurately complete a Job Application that incorporates education and training, previous employment experiences and transferable marketable skills, able to create a resume and cover letter for the position that incorporates their education, skills and abilities. Identify the use of STAR interviewing method to articulate the skills and qualifications to obtain employment In MIS field of healthcare industry. Prerequisite: None; [Lec/lab/Proj/Total:10/10/00/20]

Capstone project: MIS-701

In this course students will be able to understand all the concepts and skills learned in previous courses in further deeper level. Furthermore, they will be able to implement their understanding to solve the various cases and issues in Medical Billing and coding field. In that end they will apply their deep understanding to the real-world life case studies in the form of a project provided by the instructor at the beginning of the course and students have to submit the completed project by the end of the assigned due dates. Prerequisites: MIS 502; Lec/lab/Proj/Total: [10/00/130/140]

Dental Assistant Program

DA101: Professions of Dental Assistant & Dental Anatomy, Terminology: In this module, students will learn the roles and responsibility of a dental assistant in dental health team, and the community. This will introduce the skills required to be successful in the dental assisting program and profession including to develop a basic understanding of the anatomy and physiology of the human body and will acquire knowledge of cells, tissues, organs and all the organ systems of the human body in details of Dental Anatomy, Dental terminology & the different Dental specialties. Students will be able to identify the detail composition of four main parts of a tooth- the enamel, the dentin, the pulp, and the root. Students will be able to know the dental terminology that is being used in the dental field. It also discuss the types of anesthetic and sedation used in the dental office, techniques used to manage, control or eliminate pain and anxiety, discuss proper procedure for assembling and disassembling an aspirating syringe for

anesthetic, proper documentation of all techniques used, learning and managing nitrous oxide equipment, administration and monitoring of nitrous oxide. Also, learn procedures for emergency situations in the dental office. and learn to achieve moisture control and hemostasis using proper gingival retraction techniques, packing cord, mixing cements, charting with EagleSoft software. **Prerequisite: None [Lec/Lab/Ext; [78/18/00/96]**

DA 102: Periodontics, Endodontics, Oral and Maxillofacial Surgery

This module teaches the different specialties in dentistry, learn different periodontal procedures (I.e. surgical scaling and root planning, soft tissue grafting), endodontic procedures (I.e. root canal retreatment, apicoectomy), oral surgery procedures (surgical extractions, alveloplasty), pediatric procedures (pulpotomy, stainless steel crown), and orthodontic procedures (Invisalign, space maintainer). From this module, students will learn the different instruments used in each specialty, including materials and steps to a composite procedure, crown procedure. Students will be introduced to prosthodontic, endodontic, oral and maxillofacial surgery, orthodontic and periodontic procedures performed within a general dental practice. They will learn dental care for pediatric and geriatric clients as well. The role of a dental assistant in community oral health practice.
Prerequisite: DA 101 [Lec/Lab/Ext; [10/42/00/52]

DA103: Radiation Safety and X-rays

The topics includes mainly the physics of radiation, risks and specifics regarding x-ray exposure. Furthermore, this topic consists of safety measures to ensure absolute minimum amount of radiation exposure occurs including types of radiography, manual film processing procedures, and errors in film placement or processing in different types of digital imaging and how to use them. Mounting x-rays, proper film placement, and exhibiting infection control when taking and/or processing radiographs. Above all, it review proper oral hygiene instruction, discuss effects of nutrition and medical conditions on oral health, discuss benefits of good oral health with the use of fluoride and preventive care including placement of sealants and routine maintenance with coronal polishing. Also, students will be able to learn and identify materials needed for preventative procedures. Students will learn Properly Use Personal Protective Equipment (PPE) during Dental profession, and about the history of radiography, various procedures to take radiographs, and different types of dental instruments. They will learn the different types of X-rays and their meaning. Students will produce maxillary and mandibular images on a manikin using the occlusal technique, able to mount full mouth radiographic surveys and identify anatomic landmarks on manikins using the paralleling and bisecting techniques. Furthermore, students will be able to capture Clinically Acceptable Radiographs Included in a Full Mouth Series of X-Ray. **Prerequisite: DA 102 [Lec/Lab/Ext; [77/18/00/95]**

DA 104: Infection Control and Sterilization: In this module, students will focus on infection prevention and control in the dental office including to learn to implement policies and procedures necessary to protect yourself, clients and co-workers and to prevent transmission of disease in the dental office. Students will learn the important hygiene about teeth, instruments and materials. Students will be able to learn how to maintain and document a quality assurance for infection control and safety throughout the dental office. **Prerequisite: DA 103 [Lec/Lab/Ext; [10/44/00/54]**

DA105: Clinical Dentistry, Moisture Control, the Dental Patient, the Dental Examination.
In this module, students will be able to learn everything about dental charting, as well as the Chairside dental procedures Including Instrument Transfer and Moisture Control. Chairside assisting, instrument transfer, proper ergonomics in the dental office and treatment operatory, duties and functions of the dental assistant, utilizing proper retraction techniques and materials for moisture control, seating patients, reviewing medical history and vital signs, creating patient charts, written and digital charting of complete oral examination of hard and soft tissue (probing measurements, tooth numbers, restorations, treatment needs, etc.). It will teach teach the students to understand how a dentist knows the patient's needs, as well as the front desk, while in Dental procedure student will be able to explore various available procedures for teeth including Digitally Chart Existing and Planned Treatment. Furthermore, students will be introduced to a variety of moisture control methods used to apply and remove a dental dam and apply other isolation techniques required for dental procedures including to maintain a clear operating field for dental procedures.
Prerequisite: DA 104 [Lec/Lab/Ext; 79/20/00/99]

DA106: Impression Materials, and Laboratory Procedures
This topic teaches the different impression materials and trays used for each, pouring up impressions to fabricate models for diagnostic purposes or for fabrication of custom trays used for bleaching procedures. Furthermore, it teaches different cements and their mixing, the purpose and procedure for bite registrations. In this module, students will learn the importance of proper set-ups of Dental tray to increase efficiency and reduce the risk of exposure to harmful pathogens before each patient's exam. Furthermore, students will be able to learn about Dental impressions which are used to create various types of models, or casts of mouth. These models will help to the dentist to identify how the dental arches fit together, including the size and relationship of teeth and gums, and to Fabricate Temporary Crown matrices, cement and remove custom provisional crowns on dental manikins and Bleach Trays.
Prerequisite:DA105[Lec/Lab/Ext; 75/22/00/97]

DA 107: The Job Search Resume writing & Mock Interview:
This module includes Personal and professional goals, appropriate interview etiquette and attire, negotiating salary, preparing a resume, the interview process, following up, proper termination or resignation procedures. Students will dress in interview attire, participate in one-on-one mock interviews with focus on questions, responses, body language, and dialogue.
Prerequisite: DA 106 [Lec/Lab/Ext; 10/45/00/55]

DA108: Externship/Extensive Skills Review Practicum: In this module, students will be able to perform dental assisting skills under the mentorship of a licensed dental assistant in dental facility or in the lab of CTK under the supervision of approved instructor who is also a licensed dental assistant. The mentor in partnership with the dentist or approved instructor will offer

feedback and evaluate employability and dental assisting skills In a general dental practice, students will observe the various roles of the dental assistant to prepare them to participate as a member of the dental team. This module further provides an opportunity to observe dental professionals performing various procedures. Students will be working on various manikins and peers in the Dental Assisting facility to prepare to practice using four-handed dentistry, develop instrumentation handling skills, take vital signs and assist with an appointment of patient. Furthermore, in preparation for client care procedures, students will also be able to apply professional skills and practice clinic support procedures.

Prerequisite: DA 107 [Lec/Lab/Ext; [00/00/80/80]

Vocational English Second Language (VESL)

SLP 101 Speaking, Listening, Pronunciation I: Fundamentals of the English Language, Lecture

This course focuses on developing foundational listening, speaking, and pronunciation skills. Students will practice understanding spoken English, improve their ability to articulate thoughts clearly, and work on accurate pronunciation. Designed for beginners, the course aims to build confidence and competence in everyday verbal interactions, laying a solid groundwork for further language study.

Subject Hours: ***Lec. / Lab/Total; 65/26/91***

GRA 101 Grammar I: Fundamentals of the English Language.

This course provides a foundational understanding of English grammar, focusing on the core structures and rules that govern the language. Students will explore essential topics such as parts of speech, sentence structure, punctuation, and common grammatical errors. Through lectures, exercises, and practical applications, the course aims to enhance students' ability to construct clear, accurate, and effective sentences. Ideal for beginners or those looking to strengthen their grasp of English grammar, GR 101 is designed to build confidence in writing and communication across various contexts.

Subject Hours: ***Lec. / Lab/Total; 65/27/92***

RWV 101 Reading, Writing, and Vocabulary I: Fundamentals of the English Language, Lecture.

This introductory course offers a comprehensive approach to mastering English language skills, focusing on writing, reading, and vocabulary development. Students will engage in activities designed to improve their ability to read and comprehend various texts, expand their vocabulary, and apply these skills in writing clear and compelling sentences and paragraphs. Through guided practice, discussions, and exercises, WRV 101 aims to build a solid foundation in English language proficiency, which is essential for academic and professional success. Ideal for beginners, this course sets the stage for more advanced language studies.

Subject Hours: ***Lec. / Lab/Total; 65/26/91***

SLP 102 Speaking, Listening, Pronunciation II: English in Everyday Life, Lecture.

This course focuses on enhancing students' listening, speaking, and pronunciation skills in practical, everyday situations. Building on foundational knowledge, LSP 102 emphasizes improving conversational fluency, understanding spoken English in various contexts, and refining pronunciation for more transparent communication. Through interactive activities, role-playing, and guided practice, students will gain confidence in using English in daily interactions, including informal conversations and more structured speaking scenarios. This course is ideal for learners who want to strengthen their ability to communicate effectively and naturally in English.

Subject Hours: ***Lec. / Lab/Total; 65/27/92***

GRA 102 Grammar II: English in Everyday Life, Lecture.

This course is designed on foundational grammar knowledge, focusing on the practical application of English grammar in everyday communication. GR 102 emphasizes more complex grammatical structures, including verb tenses, sentence variety, and the use of clauses and phrases. Students will engage in activities that reinforce their ability to use grammar accurately in spoken and written English, enabling them to express ideas clearly and effectively in various contexts. Through practical exercises, discussions, and writing assignments, this course aims to refine students' grammatical skills and enhance their overall fluency in English.

Subject Hours: ***Lec. / Lab/Total; 65/26/91***

RWV 102 Reading, Writing, and Vocabulary II: English in Everyday Life.

This course advances students' skills in writing, reading, and vocabulary, with a focus on practical application in everyday situations. WRV 102 builds on essential knowledge, guiding students to read and analyze more complex texts, expand their vocabulary with words and phrases relevant to daily life, and write more sophisticated and coherent paragraphs and essays. The course emphasizes the integration of these skills to enhance overall communication abilities. Through targeted exercises, reading assignments, and writing tasks, students will gain greater confidence in their ability to use English effectively in real-world contexts.

Subject Hours: ***Lec. / Lab/Total; 65/27/92***

SLP 103 Speaking, Listening, Pronunciation III: Understanding Work Culture.

This course is designed to improve students' listening, speaking, and pronunciation skills within a professional context. LSP 103 focuses on understanding and navigating work culture through enhanced communication abilities. Students will practice listening to and interpreting workplace conversations, developing effective speaking strategies for professional interactions, and refining pronunciation to ensure clarity in business settings. Through role-plays, simulations, and discussions on workplace etiquette, students will gain the skills needed to confidently and effectively engage in diverse professional environments. This course is ideal for those seeking to excel in professional communication and adapt to various work cultures.

Subject Hours: ***Lec. / Lab/Total; 65/27/92***

GRA 103 Grammar III: Understanding Work Culture.

This grammar course focuses on professionally applying complex grammatical structures and conventions. GR 103 emphasizes mastering grammar rules for effective communication within diverse work environments. Students will study and practice advanced grammar topics, such as nuanced sentence structures, formal language usage, and business writing conventions. The course aims to enhance students' ability to produce clear, precise, and professional written and spoken communication. Through practical exercises, case studies, and real-world scenarios, students will develop the grammatical skills necessary to navigate and contribute to various work cultures successfully.

Subject Hours: ***Lec. / Lab/Total; 65/26/91***

RWV 103 Reading, Writing, and Vocabulary III: Understanding Work Culture.

This course delves into the skills needed for effective communication within professional settings, focusing on writing, reading, and vocabulary. WRV 103 emphasizes understanding and adapting to work culture through enhanced literacy skills. Students will engage with complex texts relevant to business and professional environments, expand their vocabulary with industry-specific terms, and practice writing clear, persuasive, and contextually appropriate documents. The course includes analyzing professional writing samples, developing targeted vocabulary, and crafting various business communications. By the end of the course, students will be adept at using language effectively to navigate and thrive in diverse work cultures.

Subject Hours: ***Lec. / Lab/Total; 65/27/92***

SLP 104 Speaking, Listening, and Pronunciation IV: Contemporary Topics.

This course focuses on refining speaking, listening, and pronunciation skills by exploring contemporary topics and current events. SLP 104 challenges students to engage in discussions, presentations, and debates on relevant and evolving issues, enhancing their ability to communicate effectively in modern contexts. The course emphasizes listening to and interpreting diverse viewpoints, articulating informed opinions, and achieving clear pronunciation in various professional and social settings. Through interactive activities, multimedia resources, and real-world simulations, students will develop sophisticated communication strategies to navigate and contribute to conversations on contemporary topics confidently and precisely.

Subject Hours: ***Lec. / Lab/Total; 65/26/91***

GRA 104 Grammar IV: Contemporary Topics.

This grammar course explores the application of sophisticated grammatical structures and rules within the context of contemporary topics and current events. GRA 104 builds on previous grammar knowledge by focusing on how advanced grammar can enhance clarity, precision, and effectiveness in discussing modern issues. Students will study complex sentence structures, nuanced language usage, and the adaptation of grammatical conventions to various contemporary contexts. Through analysis of current texts, practical exercises, and writing assignments, students will refine their grammatical skills to produce polished and contextually

appropriate communication on relevant and evolving subjects.
Subject Hours: ***Lec. / Lab/Total; 65/27/92***

RWV 104 Reading, Writing, and Vocabulary IV: Contemporary Topics.

This advanced course focuses on developing writing, reading, and vocabulary skills by exploring contemporary topics and current issues. RWV 104 encourages students to engage with and analyze various modern texts, from articles and essays to multimedia sources. Students will expand their vocabulary with terms relevant to current trends and topics and apply this expanded vocabulary to produce well-structured and insightful written responses. The course emphasizes critical reading and writing techniques to effectively communicate complex ideas and perspectives on contemporary subjects. Through interactive discussions, writing workshops, and analytical exercises, students will enhance their ability to engage with and contribute to discussions on current events and modern issues.
Subject Hours: ***Lec. / Lab/Total; 65/26/91***

Health, Nutrition & Wellness, and Weight Loss

Body Parts: This seminar provides the overview of human body parts, its organs and function. Furthermore, it provides organization of the body parts, system & Functions, common abbreviations. **Lec/lab/Total [01/00/01]**

General Lifestyle Pattern: This course surveys about the Understand of the inter-complexities of different lifestyle, nutrition and wellness through the concepts of evidence-based lifestyle and pillars of lifestyle medicine. **Lec/lab/Total [02/01/02]**

Types of Nutrition: This course surveys the main types of Nutrition, their examples, function. It further explains the number of several types of food items, basic and proper nutrition including the significance of balance diet for health and wellness in life. **Lec /lab/Total [02/00/02]**

Science of Weight loss: This course surveys the types of weight loss including the explanation of pros and cons. It explains the science behind the weight loss, including the rules. It also introduces the tracking of the various weight loss plan in specified time, and their risk of applying the rules of weight loss. **Lec/lab/Total [03/00/03]**

Physical Therapy Aide

Medical Terminology: This seminar provides the overview of human body systems, its organs and function. Furthermore, it provides Basic word structure, organization of the body parts, system & Functions, common abbreviations & symbols. **Lec/lab/Total [01/01/02]**

Introduction to Physical Therapy : This course surveys the roles & Career Opportunities of Physical Therapy Aide. It further introduces the Medical Ethics, legal issues in the workplace and understanding the Patient's Medical Records. **Lec/lab/Total [01/01/02]**

Medical Disorders Principal & Safety Issues: This course surveys the diseases and disorders

of bones & Joints, burns, Genitourinary disorders. It further teaches the safety aspects in the workplace, practicing body alignment & movement, proper handwashing, infection control and Major Muscles of the human body. **Lec /lab/Total [05/01/06]**

Physical Therapy Modalities & Patient Preparation: This course surveys the first aid, CPR, Body Mechanics, Verbal commands & Transporting Techniques. It also teaches skills about Positing the patient, transfer techniques for the patient, wheelchairs, Ambulation & Gait Training, Therapeutic, Heat therapies and specialized clinical procedures. **Lec/lab/Total [06/02/08]**

Computerized system validation (CSV)

Introduction to System level risk (SLR):

This course review the system level risk (SLR), and Requirement Risk Assessment (RRA) through authoring workshop, homework & review. Lec /lab/Total [03/02/05]

Authoring IQ/OQ/PQ/UAT review.

This course introduces the meaning of IQ/OQ/PQ/UAT, the Execution GDP/DI workshop, and review. Lec /lab/Total [03/02/05]

Discrepancy, Deviation & CAPA: This course reviews the definition, concept for Discrepancy, Deviation & Corrective and Preventive Actions (CAPA) management. Lec /lab/Total [03/02/05]

Validation Summary Report (VSR) : This course review the concepts of VSR and ways to implement in the Management workshop plan and summary. Lec /lab/Total [03/02/05]

General Understanding on Nursing Education System & Technology (GUEST) Seminar

Nursing Program Assessment Refresher: This course surveys the ladder of Nursing programs and degrees in USA. The scope of various aspects of the exam that a student needs to prepare will be introduced with examples of standarized tests in comparison with other testing exams, in details. In this course students will have an opportunity to build the strategy to pass the insurance exam for LVN, LVN-RN and RN programs. Lec/lab/Total [02/02/04]

Dental Assistant/ Hygiene Program Refresher: This course surveys the available program and degrees in USA. It details the scope of each discipline of dental program, the job demand, job growth and security in future. It also details the assessment exam to enroll in various Disciplines of Denal program from Dental assistant program to Dentist degree including the availability of programs in various educational institute. Lec/lab/Total [02/02/04]

Allied Health Technology Refresher: This survey course identifies the types of technology the professionals are using to complete their job. Furthermore, it details the use, demand, scope and future pros and cons of the technologies that may varies in Patient portal to billing & coding software's. Lec/lab/Total [02/02/04]

RN/LVN Nursing Refresher Program

LVNRN-101: Orientation Process:

The course begins with an introduction to the instructor, providing students with an overview of their qualifications and expectations for the course. It also covers the requirements and recommendations the Board of Nursing (BON) sets to ensure that students meet professional and academic standards. A detailed explanation of the didactic and clinical hours required for the program is provided, outlining the balance of theoretical and hands-on learning. Lastly, the program completion requirements are discussed, including all necessary assessments, hours, and competencies that must be achieved to graduate from the program successfully.

Course Length: ***Lect./ Lab./Clinical/ Total; 05 Hrs./ NA/ NA/ 05 Hrs.***

LVNRN-102: REVIEW OF RULES & REGULATIONS

The Nursing Practice Act (NPA) serves as the legal foundation for nursing practice, defining the scope of practice, responsibilities, and boundaries for registered nurses to ensure safe and effective care. In conjunction with the NPA, the Board of Nursing (BON) rules provide specific regulations that govern nursing practice within the state, establishing guidelines for professional conduct, licensure, and disciplinary actions. Position statements from the BON offer additional clarification on various aspects of nursing practice, addressing emerging issues or providing guidance on ethical and clinical dilemmas. Finally, licensure and renewal requirements outline the necessary steps for nurses to obtain and maintain their professional license, including continuing education and other criteria to ensure competency and adherence to the standards of practice.

Course Objectives: Students will be able to understand the Nursing Practice Act (NPA) and its role in defining the legal scope of nursing practice, focusing on delegation and laws that ensure safe, effective care. They will be able to explain the role of the Board of Nursing (BON) in regulating licensure, professional standards, and education to protect the public. Students will be able to identify misconduct rules and understand nurses' ethical responsibilities, emphasizing accountability for their actions. They will describe the nursing peer review process, including incident-based and safe harbor processes, and understand how these evaluations protect nurses from undue disciplinary actions. Students will also understand the Nursing Licensure Compact and its benefits, allowing nurses to practice across state lines without additional licenses. They will demonstrate knowledge of Continuing Education Units (CEUs) and their importance in maintaining competency and fulfilling licensure renewal requirements. Lastly, students can apply guidelines for nurses re-entering clinical practice, ensuring they are adequately prepared through refresher courses or supervised practice to return to patient care safely. ***The weightage value of this course is 15%.***

Course Length: ***Lect./ Lab./Clinical/ Total; 12 Hrs./ NA/ NA/ 12 Hrs.***

LVNRN-103: STANDARDS OF NURSING PRACTICE

Course Description: The scope of nursing practice defines the range of activities and responsibilities nurses are authorized to perform based on their education, training, and legal

regulations. It ensures that nurses provide care within the boundaries of their expertise while prioritizing patient safety. Patient safety refers to minimizing risks and preventing harm during medical care, with nurses playing a key role in monitoring, identifying potential hazards, and adhering to protocols. Nursing safety involves protecting nurses from physical, emotional, and environmental risks in their work environment and ensuring that proper precautions, training, and support are in place to maintain a safe and healthy workplace.

Course Objectives: Students will be able to define the standards of nursing practice and understand how these standards are influenced by a nurse's level of education and licensure, recognizing the distinct responsibilities and competencies of LPNs, RNs, and advanced practice nurses. They can apply a decision-making model for the scope of practice to assess situations and determine whether a task falls within their legal and professional boundaries. Students will demonstrate the ability to incorporate evidence-based nursing into clinical practice by using current research to guide their decisions and improve patient outcomes. They will also be able to identify and apply key patient safety principles, including infection control (IC) and prevention (P), to minimize harm and ensure safe care. Additionally, students will understand the importance of nursing safety, especially in addressing workplace violence, and will be able to utilize workplace policies, training, and support systems to protect nurses from physical or emotional harm. *The weightage value of this course is 5%.*

Course Length: ***Lect./ Lab./Clinical/ Total; 04 Hrs./ NA/ NA/ 04 Hrs.***

LVNRN-104: SYSTEMATIC APPROACH/NURSING PROCESS

Course Description: The nursing process is a systematic approach to patient care that includes five key components: assessment, diagnosis, planning, implementation, and evaluation. A thorough physical assessment involves a systematic approach to evaluate various body systems: neurological (assessing the mental status and neurological function), cardiovascular (evaluating heart rate, rhythm, and circulation), respiratory (examining lung sounds, oxygenation, and breathing patterns), integumentary (inspecting skin, nails, and hair for abnormalities), gastrointestinal (assessing bowel sounds, digestion, and abdominal tenderness), genitourinary (evaluating urinary output and signs of infection), musculoskeletal (assessing strength, movement, and joint function), and endocrine (examining hormone levels and metabolic function). In caring for patients with fluid/electrolyte imbalances, infections, or psychosocial impairments, the nurse must assess and intervene to restore balance, prevent complications, and provide comprehensive support, addressing physical and emotional needs to promote overall health and well-being.

Course Objectives: RN/LVN students will be able to understand the nursing decision-making framework and apply it to guide clinical judgments in various patient care situations. They will learn to develop individualized care plans tailored to each patient's needs. Students will differentiate between comprehensive, initial head-to-toe, and focused assessments, recognizing when to use each type based on the clinical context. They will understand the significance of normal and abnormal assessment findings across each body system, knowing how they influence clinical decisions and interventions. Students can provide patient-centered care, ensuring that care plans and interventions align with patients' preferences, needs, and values. The course will also teach students how to evaluate nursing interventions and the patient's response, emphasizing the importance of monitoring outcomes and adjusting care as needed. Finally, students will

understand the importance of each step in the nursing process—planning, implementation, and evaluation—to ensure the delivery of effective, evidence-based patient care. ***The weightage value of this course is 30%.***

Course Length: ***Lect./ Lab./Clinical/ Total; 24 Hrs./ 08/ 32/ 64 Hrs.***

LVNRN-105: PHARMACOLOGY REVIEW

Course Description: Pharmacology in nursing studies how medications interact with the body and how nurses can safely administer them to promote patient health. Nurses must be aware of the side effects of drugs, which are common, often mild reactions that can occur during treatment, such as nausea or dizziness. Adverse events, on the other hand, are more serious, harmful reactions that can result in significant complications, such as organ damage or allergic reactions. Understanding drug schedules and classifications is also essential, as medications are categorized into schedules based on their potential for abuse, with higher schedules indicating more significant risk. Nurses must be knowledgeable about these classifications to ensure proper handling, storage, and administration of medications, safeguarding patient safety.

Course Objectives: Students will be able to demonstrate a thorough understanding of medication orders, ensuring they can accurately interpret and follow them to provide safe and effective care. They can prevent medication errors by consistently applying the five rights (right patient, proper medication, right dose, correct route, right time) and performing the three checks (checking the medication label before preparing, preparing, and administering). Students will be able to explain the National Patient Safety Goals (NPSG) initiative and its recommendations, applying these guidelines to enhance patient safety in their practice. Additionally, students will be able to recognize and implement strategies for administering medication to older adults, considering age-related physiological changes and adjusting care to ensure safe and effective medication management for this population. ***The weightage value of this course is 20%.***

Course Length: ***Lect./ Lab./Clinical/ Total; 16 Hrs./ 04/ 12/ 32 Hrs.***

LVNRN-106: Medication Administration

Upon completion of this subject, students will be able to describe the various ways medications are supplied to facilities. They will be able to detail requirements for correct storage and labeling of the medication and their responsibility for its control and accountability. Students will explain how potential errors may occur from supply and storage of medications and will be able to describe procedures for safeguarding medicine from contamination. Students will recount facility policy for medication orders and relate allowable and prohibited practices. They will be able to explain their role and responsibilities in drug therapy. They will demonstrate how to accurately prepare (set up) medications and list the equipment needed. They will demonstrate proper procedures and techniques for administering medications and discuss responsibilities following drug administration. Students will learn how to take vital signs and observe/monitor patients. They will discuss points where potential drug errors or unsafe practices may occur. Students will demonstrate writing an incident report and discuss the follow up if an administration error is made. They will demonstrate correct procedure for administration of oxygen and be able to follow guidelines for recording medication administration. Students will demonstrate how to complete medical records appropriate to medication administration and

discuss protection, access, retention and legal responsibility of medical records.
The weightage value of this course is 20%.

Course Length: ***Lect./ Lab./Clinical/ Total; 16 Hrs./ 04/ 12/ 32 Hrs.***

LVNRN-107: Documentation

Course Description: This includes using standardized formats, avoiding errors, and ensuring that all relevant patient information is recorded promptly. They will also learn about legal guidelines on patient records, recognizing the importance of maintaining confidentiality, complying with privacy laws such as HIPAA, and understanding the legal implications of improper documentation. Accurate documentation is crucial for quality care and protecting the nurse and healthcare organization from legal liability.

Course Objectives: Students will be able to understand the principles of complete and accurate documentation, recognizing the importance of recording clear, concise, and thorough information to ensure patient care is properly communicated. They will be able to describe the nurse's accountability in communicating pertinent data, ensuring that critical information is effectively shared with the healthcare team to inform decision-making and promote patient safety. Students will be able to identify the legal implications of documentation, including the importance of maintaining confidentiality and complying with HIPAA regulations to protect patient privacy and avoid legal consequences. Additionally, students will be able to demonstrate knowledge of acceptable documentation methods, including the procedure for making late entries, ensuring that any missed or delayed information is documented appropriately while maintaining accuracy and integrity. ***The weightage value of this course is 10%.***

Course Length: Lect./ Lab./Clinical/ Total; 08 Hrs./ NA/ 24/ 32 Hrs.

IV Therapy Certification Seminar

Module 1 Focus: Anatomy and Physiology

- The Vascular System: Veins, Arteries and Bone Marrow
- The Three Layers of the Vessels and Their Function
- Differentiating Arteries from Veins
- Veins used in Peripheral Intravenous Therapy
- Nerves—Avoiding Damage
- Skin-- Anatomy and Physiology

Module 2 Focus: Equipment's, Infection, Complications, legal aspects

- Equipment and devices: The types of equipment and devices used in IV therapy
- Methods and techniques: The methods and techniques used in IV therapy
- Infection control: Infection control measures for IV therapy
- Safety: Safety considerations for IV therapy
- Complications: Complications that can arise from IV therapy
- Legal and ethical considerations: The legal and ethical considerations of IV therapy

Module 3 Focus: Step by Step Guide to

- I.V Set Up,
- Short Peripheral Insertion and Removal of Device
- Pre-insertion Procedures

- Equipment Determination
- IV Bag and Administration Set Preparation
- Insertion Procedure—One Handed Technique
- Therapy Discontinuation

Module 4 Practical lab Focus

- Finding a vein Module
- Venous Access Device Insertion
- Venous Access Device Troubleshooting
- Tips and Techniques
- Venous Access Device Removal
- Skills Practice
- Skills Testing

Basic math seminar

Course #1: Fractions and Decimals

Day 1& 2

- Basic operations with fractions (addition, subtraction, multiplication, division)
- Converting improper fractions to mixed numbers and vice versa
- Adding and subtracting fractions with different denominators
- Converting between fractions and decimals
- Performing basic operations with decimals
- Rounding decimals according to nursing standards

Course # 2: Percents and Ratios/Proportions

Day 1& 2

- Converting between fractions, decimals, and percentages
- Calculating percentages of given numbers
- Applying percentages in clinical scenarios (e.g., medication dosages)
- Converting between ratios, fractions, decimals, and percentages
- Setting up and solving proportion problems
- Practical applications in medication calculations

Course # 3: Metric and Household Measurements/ Clinical Application

Day 1& 2

- Understanding metric prefixes and place values
- Converting between metric, apothecary, and household systems
- Practical exercises in measurement conversions
- Drug dosage calculations (oral and parenteral)
- IV flow rate calculations
- Practice scenarios and case studies
- Comprehensive review of all topics covered
- Practice exams and quizzes
- Final assessment to ensure readiness for the LVN program

Surgical and Sterile Processing Technician Program

Foundation Knowledge & Skills of Sterile Processing [SsTech 101]

The Foundation Knowledge of Sterile Processing course is introduced by learning medical terminology, commonly used in healthcare and surgical environments. This will enable them to

communicate accurately and professionally with other medical staff and to understand documentation related to surgical procedures and equipment. The course then explores surgical anatomy and physiology, focusing on the structure and function of the human body systems most involved in surgical interventions. This knowledge allows students to understand the surgical context of the instruments and supplies they handle.

A key component of the course is microbiology, where students learn about microorganisms, including bacteria, viruses, fungi, and spores, and how these pathogens contribute to infection and disease transmission. This leads into an in-depth study of infection control and prevention, where students explore the principles of aseptic technique, standard precautions, transmission-based precautions, and environmental control methods used to prevent healthcare-associated infections (HAIs). Prerequisite: None; lec/lab/clinical/Total; [94/8/40/142]

Course Objectives

By the end of this course, students will be able to:

1. **Interpret and use basic medical terminology** relevant to sterile processing, surgical procedures, and healthcare communication.
2. **Describe the structure and function of the human body systems**, focusing on anatomical regions and organs commonly involved in surgical procedures.
3. **Identify key concepts of microbiology**, including types of microorganisms, modes of transmission, and the conditions that support microbial growth.
4. **Explain the chain of infections and the role of sterile processing** in breaking that chain to prevent healthcare-associated infections (HAIs).
5. **Apply infection control and prevention principles**, including standard and transmission-based precautions, aseptic techniques, and environmental controls.
6. **Recognize the relationship between human anatomy, surgical procedures, and instrument selection**, supporting safe and effective surgical preparation.
7. **Demonstrate an understanding of how microbiology, anatomy, and infection control intersect** to guide best practices in sterile processing environments.

Practice of Sterile Processing [SsTech 102]

Course Description:

The Foundation Knowledge of Sterile Processing course is introduced by learning medical terminology, commonly used in healthcare and surgical environments. This will enable them to communicate accurately and professionally with other medical staff and to understand documentation related to surgical procedures and equipment. The course then explores surgical anatomy and physiology, focusing on the structure and function of the human body systems most involved in surgical interventions. This knowledge allows students to understand the surgical context of the instruments and supplies they handle.

A key component of the course is microbiology, where students learn about microorganisms, including bacteria, viruses, fungi, and spores, and how these pathogens contribute to infection

and disease transmission. This leads into an in-depth study of infection control and prevention, where students explore the principles of aseptic technique, standard precautions, transmission-based precautions, and environmental control methods used to prevent healthcare-associated infections (HAIs). Prerequisite: None; lec/lab/clinical/Total; [167/8/40/215]

Course Objectives

By the end of this course, students will be able to:

8. **Interpret and use basic medical terminology** relevant to sterile processing, surgical procedures, and healthcare communication.
9. **Describe the structure and function of the human body systems**, focusing on anatomical regions and organs commonly involved in surgical procedures.
10. **Identify key concepts of microbiology**, including types of microorganisms, modes of transmission, and the conditions that support microbial growth.
11. **Explain the chain of infections and the role of sterile processing** in breaking that chain to prevent healthcare-associated infections (HAIs).
12. **Apply infection control and prevention principles**, including standard and transmission-based precautions, aseptic techniques, and environmental controls.
13. **Recognize the relationship between human anatomy, surgical procedures, and instrument selection**, supporting safe and effective surgical preparation.
14. **Demonstrate an understanding of how microbiology, anatomy, and infection control intersect** to guide best practices in sterile processing environments.

Practice of Sterile Processing [SsTech 102]

Course Description:

The Practice of Sterile Processing course provides an in-depth exploration of the essential processes and responsibilities within the sterile processing field. This course equips students with the technical skills and knowledge needed to ensure cleanliness, disinfection, sterilization, and safe handling of surgical instruments and medical devices. Students begin by learning the principles of decontamination, including the proper handling and transportation of soiled instruments and the use of manual and mechanical cleaning techniques. Emphasis is placed on using personal protective equipment (PPE) and strict infection control measures. The course then covers disinfection, guided by the Spaulding classification system, where students learn how to select and use high-, intermediate-, and low-level disinfectants and understand the chemical handling protocols necessary for workplace safety.

Students also comprehensively understand surgical instruments, including their types, functions, identification, inspection, and maintenance. They learn to assemble basic and specialty instrument sets and prepare them for sterilization using packaging materials like peel pouches, wraps, and rigid containers, applying chemical indicators and correct labeling techniques. The course introduces point-of-use disinfection, where learners practice pre-cleaning instruments immediately after using surgical settings and coordinate with the operating room for timely instrument processing. Special attention is given to complex instrumentation such as robotic, endoscopic, and laparoscopic tools, focusing on disassembly, functional testing, and following manufacturers' instructions for use (IFUs). In hands-on lab sessions, students work with heat-sensitive devices, applying high-level disinfection or low-

temperature sterilization techniques using peracetic acid or hydrogen peroxide systems. They also study and operate high-temperature sterilization methods like autoclaves, learning about cycle parameters, troubleshooting, and load configurations.

The course further explores sterile storage and transport, including best practices for maintaining sterility during storage, shelving, labelling, and distribution. Students learn monitoring and record-keeping procedures, using biological, chemical, and mechanical indicators, and maintaining logs for regulatory compliance. Emphasis is also placed on quality assurance, with students introduced to internal audits, corrective actions, and continuous improvement using Lean and Six Sigma concepts. The final component covers supply chain management, where students learn about inventory control, receiving and distributing sterile items, and using tracking systems for restocking. In the culminating lab sessions, students perform instrument wrapping, packaging, autoclave operation, and validation, bringing all learned concepts into real-world practice. By the end of the course, students will be fully prepared to support surgical teams by ensuring the availability of safe, sterile instruments and equipment.

Prerequisite SsTech 101; Lec/lab/Clinical/Total: 171/8/40/215

Course Objectives

By the end of this course, students will be able to:

1. **Demonstrate proper procedures for decontaminating soiled medical and surgical instruments**, including safe transport, manual cleaning, and the operation of mechanical cleaning equipment.
2. **Apply infection control principles and standard precautions**, including appropriate use of personal protective equipment (PPE) and adherence to regulatory guidelines for safety and cleanliness.
3. **Differentiate between disinfection levels (high, intermediate, low)** and select appropriate chemical disinfectants based on device classification and intended use.
4. **Identify and classify a variety of surgical instruments**, describing their structure, function, and maintenance requirements.
5. **Assemble, prepare, and package instrument trays and individual devices** using industry-standard materials such as peel pouches, sterilization wraps, and rigid containers.
6. **Perform point-of-use cleaning and disinfection procedures**, including using enzymatic sprays and communication protocols with operating room personnel.
7. **Reprocess complex instrumentation**, including robotic, laparoscopic, and endoscopic devices, according to the manufacturer's instructions for use (IFUs).
8. **Distinguish between high-temperature and low-temperature sterilization methods**, and operate equipment such as steam autoclaves, hydrogen peroxide gas plasma, and peracetic acid systems.
9. **Process heat-sensitive devices using validated disinfection or low-temperature sterilization methods**, ensuring effectiveness without compromising device integrity.
10. **Maintain sterility through proper storage and transportation of reprocessed instruments**, including inventory labeling, shelving practices, and handling protocols.
11. **Utilize biological, chemical, and mechanical indicators to monitor sterilization effectiveness**, and maintain accurate records in compliance with healthcare regulations.

12. **Implement quality assurance practices and internal audit procedures** to support continuous improvement and regulatory compliance within sterile processing operations.
13. **Manage sterile supply inventory**, including receiving, stocking, restocking, and using tracking systems to ensure availability and traceability of sterile instruments.
14. **Demonstrate proficiency in practical skills through laboratory exercises**, including packaging, wrapping, operating sterilizers, and validating sterilization processes.

Sterile Processing Techniques [SsTech 103]

Course Description:

The Sterile Processing Techniques course introduces students to the essential functions and responsibilities within a sterile processing department (SPD), focusing on best practices, teamwork, and communication in healthcare environments. The course explores the role of sterile processing technicians in preventing infection and supporting patient care by ensuring that medical and surgical instruments are properly cleaned, packaged, sterilized, and distributed. Students will understand how SPDs function as a vital part of the healthcare delivery system.

A key component of this course is the development of practical communication skills, including clear and professional interactions with surgical teams, nursing staff, and other departments. Emphasis is placed on terminology, documentation, and collaboration across shifts and departments to ensure safe, consistent instrument processing and delivery.

The course includes two hands-on lab components. In the first lab, students complete a quiz on basic sterile processing methods to assess their understanding of core principles such as infection control, instrument handling, and sterilization techniques. In the second lab, students perform wrapping and packaging exercises, practicing proper techniques using various materials, including wraps, peel pouches, and rigid containers. These sessions help reinforce practical skills and prepare students for real-world applications in clinical settings. Prerequisite, SsTech102: Lec/lab/Clinical/Total: [171/0/40/211]

Course Objectives:

By the end of this course, students will be able to:

1. **Explain the role and responsibilities of a sterile processing technician** within the healthcare environment and describe how the sterile processing department (SPD) supports infection prevention and patient care.
2. **Demonstrate a clear understanding of the instrument reprocessing cycle**, including cleaning, disinfection, packaging, sterilization, and distribution.
3. **Apply best practices in sterile processing**, including proper instrument handling, adherence to infection control protocols, and compliance with regulatory standards.
4. **Communicate effectively and professionally** with surgical teams, nurses, and other healthcare staff using appropriate terminology and documentation procedures.
5. **Collaborate across departments and shifts**, demonstrating teamwork and accountability to support safe and timely instrument delivery.
6. **Complete a quiz assessing knowledge of basic sterile processing methods**, including infection prevention, types of sterilization, and safety measures.

7. **Demonstrate proper wrapping and packaging techniques** using sterilization wraps, peel pouches, and rigid containers while appropriately applying internal and external indicators.

8. **Develop the practical skills necessary for entry-level roles in sterile processing**, confidently applying classroom knowledge to real-world clinical situations.

Surgical Techniques and Role of Surgical Technician [SsTech 104]

Course Description:

The Surgical Techniques and Role of the Surgical Technician course offers students a thorough understanding of the surgical environment and the critical responsibilities of surgical technicians in supporting safe, effective, and compassionate patient care. The course emphasizes the importance of communication and teamwork, equipping students to collaborate efficiently with surgeons, anesthesiologists, nurses, and other healthcare professionals within the perioperative setting. Students will learn how clear, respectful communication contributes to surgical safety, workflow efficiency, and positive patient outcomes.

Through interactive lab sessions, students will explore a typical surgical suite's facility structure and environment, including operating room layout, traffic flow, and sterile vs. non-sterile zones. A dedicated lab on environmental hazards will help students identify physical, chemical, and biological risks in the surgical setting and implement preventive safety measures. In the Sterile Techniques and Infection Control lab, students will gain hands-on experience with surgical scrubbing, gowning, gloving, and maintaining aseptic fields.

Students will also engage in a lab focused on surgical instruments, learning to identify, handle, and care for various surgical tools and setups. The course delves into perioperative pharmacology, introducing medications commonly used in the operating room, including antibiotics, anesthetics, and emergency drugs, focusing on safe handling and technician responsibilities. A section on anesthesia will provide foundational knowledge of anesthesia types, administration methods, technician support roles, and patient monitoring.

Additionally, students will be trained in safely moving, handling, and positioning patients before, during, and after surgical procedures, emphasizing patient comfort, injury prevention, and proper body mechanics. Finally, the course addresses sensitive topics such as death and dying, preparing students to approach end-of-life situations with professionalism, empathy, and an understanding of ethical and cultural considerations in surgical care.

By combining theoretical knowledge with practical lab-based experience, this course prepares students to enter the surgical field with confidence, technical competence, and a strong commitment to patient safety and teamwork. Prerequisite ; SsTech 103: Lec/lab/clinicals/Total: [123/32/80/235]

Course Objectives:

By the end of this course, students will be able to:

1. **Explain the roles and responsibilities of a surgical technician** within the perioperative team, including their contributions before, during, and after surgical procedures.
2. **Demonstrate effective communication and teamwork skills** in a surgical setting, working collaboratively with surgeons, nurses, anesthesiologists, and other healthcare professionals.
3. **Identify and describe the structure and layout of surgical facilities**, including sterile and non-sterile areas, workflow patterns, and operating room organization.
4. **Recognize common environmental hazards** in the surgical environment and implement appropriate safety measures to prevent injury and contamination.
5. **Apply sterile techniques and infection control procedures**, including handwashing, gowning, gloving, and maintaining a sterile field during surgical procedures.

6. **Identify and handle basic and specialized surgical instruments**, demonstrating correct preparation, usage, and care techniques.
7. **Describe the principles of perioperative pharmacology**, including common surgical medications, their uses, routes of administration, and technician responsibilities in handling and labeling.
8. **Understand the role of anesthesia in surgery**, including different types, methods of administration, and the technician's support role in ensuring patient safety and comfort.
9. **Demonstrate safe patient movement, handling, and positioning techniques**, ensuring proper body mechanics, patient dignity, and injury prevention.
10. **Discuss the physical, emotional, and ethical aspects of death and dying** in the surgical setting, and apply compassionate, culturally sensitive communication strategies in end-of-life care scenarios.

Advanced Surgery Techniques[SsTech 105]:

Course Description:

The Advanced Surgery and Lab Skills course provides students with an in-depth understanding of surgical procedures across multiple specialties and the advanced technical skills required to assist in the operating room with competence and confidence. The course begins with essential surgical techniques, including Surgical Skills I: Planning and Opening a Case, where students learn the preparatory steps for surgical procedures, including patient assessment, surgical positioning, draping, and maintaining a sterile field. This is followed by Surgical Skills II: Intraoperative and Immediate Postoperative Period, which focuses on intraoperative tasks such as instrument handling, suturing support, and postoperative monitoring and documentation.

Students will use multiple hands-on lab sessions to reinforce and apply their learning. Early labs include Minimally Invasive Surgery and an Introduction to Surgical Gowning, Hand Washing, and Personal Protective Equipment (PPE), providing practice in aseptic techniques and modern surgical approaches. A key lab module on Setting Up the Back Table trains students in organizing surgical instruments and supplies efficiently. Additional lab time is dedicated to Instrument Identification, where students learn to recognize, classify, and use surgical tools across various specialties. These labs are designed to simulate real-world operating room scenarios and enhance surgical readiness.

The course covers various surgical specialties to broaden clinical knowledge and build versatility. Topics include General Surgery, OB/GYN Surgery, Genitourinary Surgery, Ophthalmic Surgery, ENT (Ear, Nose, and Throat) Surgery, Oral and Maxillofacial Surgery, Plastic and Reconstructive Surgery, and Orthopedic Surgery. Each section focuses on the unique procedures, instruments, positioning requirements, and surgical considerations specific to that specialty. Students will develop a clear understanding of their role during diverse procedures and how to anticipate the needs of the surgical team. Advanced specialties are also emphasized, including Vascular and Microvascular Surgery, Thoracic Surgery, Cardiovascular Surgery, and Neurosurgery, where students learn the precision and care required for high-risk procedures. The course also explores Pediatric Surgery, focusing on age-specific considerations, and Emergency and Trauma Surgery, emphasizing rapid response, flexibility, and teamwork in high-pressure environments. Finally, students are introduced to Robotics and Laparoscopic Surgery, gaining insight into emerging technologies, camera systems, and the technician's critical role in supporting minimally invasive and robotic-assisted procedures. This course thoroughly prepares students for surgical settings, combining comprehensive knowledge with advanced practical skills to excel in a clinical or hospital operating room environment through the clinical rotation of students in surgical facilities such Surgical centers and Hospitals. Prerequisite SsTech 104: lec/lab/Clinical/Total [400/00/72/472]

Course Objectives

By the end of this course, students will be able to:

1. Demonstrate surgical case planning and setup proficiency, including patient assessment, positioning, sterile draping, and room preparation.
2. Perform intraoperative and immediate postoperative tasks, such as passing instruments, maintaining the sterile field, handling specimens, and supporting wound closure procedures.
3. Identify and describe the functions of surgical instruments across a wide range of specialties through hands-on instrument identification labs.
4. Apply sterile techniques and aseptic practices, including surgical hand scrubbing, gowning, gloving, and using personal protective equipment (PPE) properly.
5. Use appropriate instruments and supplies to set up and organize the back table and Mayo stand for various surgical procedures.
6. Assist in minimally invasive and robotic-assisted surgeries, understanding the setup and use of laparoscopic equipment and camera systems.
7. Describe the principles, standard procedures, and instrument sets associated with general surgery, OB/GYN, orthopedic, ENT, ophthalmic, oral and maxillofacial, plastic and reconstructive, and genitourinary surgeries.
8. Explain the special considerations, techniques, and support roles required in vascular, microvascular, thoracic, cardiovascular, neurosurgery, and pediatric surgery.
9. Understand emergency and trauma surgery protocols, including the surgical technician's role in high-pressure, urgent-care environments.
10. Demonstrate perioperative pharmacology and anesthesia knowledge, including medication categories, administration methods, and technician responsibilities.
11. Assist in safe patient moving, handling, and positioning before, during, and after surgical procedures, with attention to comfort, safety, and body mechanics.
12. Discuss the ethical, cultural, and emotional aspects of death and dying in surgical care and respond with professionalism and empathy in end-of-life scenarios.

Associate of Applied Science in Information Technology Cyber Security [AAS-IT CYBER]

COMPOSITION I (ENGL- 101)

This course provides knowledge on the fundamentals of the writing process and helps students learn how to use writing to gain knowledge, communicate, and analyze ideas. Students will be prepared for brainstorming, forming outlines, and researching ideas. Opportunities will also be given to create initial drafts and engage in revising and editing processes. Students will explore various elements of writing, including the author's purpose, voice, audience, and writing style.

INTRODUCTION TO CHEMISTRY (CHEM101)

This course is for non-science majors. Fundamental concepts are presented in lecture and laboratory including the periodic table, atomic structure, chemical bonding, reactions, stoichiometry, states of matter, properties of metals and nonmetals, and compounds, acid-base theory, solutions. Descriptive chemistry is emphasized. Prerequisite: None (Lect./ Lab/ Total; 30 Hrs./40 Hrs./ 70 Hrs.)

Course Number: Biology I (BIO 101)

Biology I (BIO 101) is an introductory course that provides a comprehensive overview of the fundamental principles of biology. The course studies life, cellular structure and function, genetics, evolution, and ecology. Students will explore the basic concepts of biology through lectures, hands-on laboratory exercises, and group discussions. The course is designed to equip students with the foundational knowledge needed for further studies in biological sciences. Key topics include cell biology, biochemistry, DNA/RNA, genetic inheritance, and an introduction to ecology and the diversity of life forms. By the end of the course, students will develop a deeper understanding of biological concepts and how they apply them to everyday life. Prerequisite: None (Lect./ Lab/ Total; 30 Hrs./40 Hrs./ 70 Hrs.)

Course Number: Biology II (BIO 102)

Biology II (BIO 102) course is designed to give students a solid conceptual understanding of the fundamental principles of animal and plant structure and physiology (cellular respiration and photosynthesis) and ecology. By focusing on key concepts, the course will help students grasp how living organisms interact with each other and their environment. The goal is to equip students with the foundational knowledge necessary to pursue more advanced studies in biology and related fields. The course will encourage critical thinking and problem-solving skills, enabling students to apply their understanding to various biological contexts and real-world scenarios. Prerequisite: BIO 101 (Lect./ Lab/ Total; 30 Hrs./40 Hrs./ 70 Hrs.)

Introduction to Cybersecurity (ITCS-201)

This introductory course gives students a fundamental understanding of cybersecurity concepts, tools, and techniques to protect digital information and systems. The course covers the basics of information security, including key terms, types of cyber threats, vulnerabilities, and risk management. Students will explore essential cybersecurity principles such as confidentiality, integrity, availability, and authentication. Key topics include network security, encryption, malware types, firewalls, and security protocols. The course emphasizes real-world application, introducing students to tools and techniques to defend against common cyber threats and preparing them for more advanced cybersecurity topics. This course provides a comprehensive introduction to the foundational concepts and terminology of cybersecurity, equipping learners with the knowledge to identify various types of cyber threats, vulnerabilities, and attacks. Participants will explore the importance of protecting information systems through security controls and protocols while applying basic risk management strategies and best practices to real-world scenarios. The curriculum emphasizes the role of encryption and secure communication in safeguarding data and offers hands-on experience with standard cybersecurity tools and techniques. Additionally, learners will develop a foundational understanding of network security measures, such as firewalls and intrusion detection systems (IDS), and examine the legal, ethical, and regulatory issues integral to cybersecurity. Prerequisite: None (Lect./ Lab/ Total; 40 Hrs./20 Hrs./ 60 Hrs.)

Networking Security Fundamentals (ITCS- 202)

This intermediate course focuses on identifying and implementing secure network design elements, such as segmentation and firewall strategies, to mitigate security threats and attacks. Students will learn to apply best practices for designing, implementing, monitoring, and managing comprehensive network security plans. The course also covers security incident analysis, including postmortem reporting and ongoing activities to maintain a secure network environment. Hands-on exercises will equip students with practical skills in firewall implementation, vulnerability assessment, and incident response. This course equips learners with the skills to implement and test software and hardware firewalls to secure network systems. Participants will utilize tools, practices, and technologies to design and execute effective network security plans while evaluating network activity and security logs to detect breaches and establish robust security measures. The curriculum emphasizes detecting, responding to, and mitigating various network attacks using relevant tools and strategies. Learners will also conduct postmortem analyses of security incidents to apply lessons learned for improving network defense and develop strategies to identify and protect mission-critical systems from vulnerabilities. Prerequisite: None. (Lect./ Lab/ Total; 30 Hrs./40 Hrs./ 70 Hrs.)

Cybersecurity and Digital Ethics (ITCS-301)

This course explores the intersection of cybersecurity practices and ethical considerations, providing students with a foundation in analyzing threats, assessing risks, and developing strategies to mitigate their impact. Students will examine the ethical responsibilities associated with administrative access, digital forensics, and the broader implications of cybersecurity on society. Through case studies, discussions, and practical exercises, students will learn to balance technological solutions with ethical decision-making,

addressing issues such as privacy, data protection, and societal impacts of cybersecurity policies and practices. By the end of this course, students will be able to assess and analyze potential cybersecurity threats and risks across various digital environments, evaluating their impact on individuals, organizations, and society. They will develop comprehensive mitigation strategies that align with ethical principles and legal requirements to address these threats effectively. The course emphasizes understanding ethical responsibilities in cybersecurity roles, including the implications of administrative access, decision-making, and the balance between access, control, and privacy. Students will explore ethical considerations in digital forensics, focusing on evidence collection, privacy rights, and data ownership while examining case studies to understand forensics practices' societal and legal implications. Additionally, students will analyze the broader societal impacts of cybersecurity policies, such as surveillance, privacy, and digital rights, and propose ethically sound approaches to address these challenges. Through applying ethical frameworks, students will foster critical thinking and demonstrate ethical reasoning to resolve cybersecurity and digital forensics dilemmas in real-world scenarios. Prerequisite: None. (Lect./ Lab/ Total; 30 Hrs./40 Hrs./ 70 Hrs.)

Introduction to Digital Forensics (ITCS-302)

This introductory course explores digital forensic technology's fundamental principles and practical applications. Students will learn to collect, analyze, document, and present digital evidence while adhering to a documented chain of custody. The curriculum provides an overview of ethical considerations, criminal activities, and legal frameworks related to digital investigations. Additionally, students will examine the tools and techniques used to perform forensic analysis on digital devices as part of investigations in civil or criminal cases. By the end of this course, students will be able to identify crimes committed using digital devices and understand their implications for forensic investigations. They will understand the role and responsibilities of a digital forensics technician in investigating crimes or incidents, including the use of tools and technologies for collecting and analyzing digital evidence. Emphasis will be placed on applying proper protocols for handling and preserving evidence, maintaining a documented chain of custody, and adhering to ethical and legal guidelines in compliance with relevant laws and regulations. Additionally, students will develop the skills to document findings effectively for use in civil or criminal proceedings, ensuring accuracy and professionalism throughout the investigative process. Prerequisite: None. (Lect./ Lab/ Total; 30 Hrs./40 Hrs./ 70 Hrs.)

Firewalls and Network Security Design (ITCS- 401)

This intermediate-level course provides students with the knowledge and skills to design and manage secure networks. Emphasis is placed on identifying and implementing network segmentation, firewalls, and other security measures to mitigate various security threats and attacks. Students will explore industry best practices for designing, implementing, monitoring, and managing comprehensive network security plans. The course also examines security incident postmortem reporting, and the continuous activities required to maintain network security. By the end of this course, students will be able to identify key elements of secure network design, such as segmentation and firewall implementation, to mitigate security threats effectively. They will acquire the skills to design, implement, and manage network security plans aligned with industry best practices while utilizing software and hardware firewalls to secure systems and test their effectiveness. Students will analyze security logs to assess security levels, detect potential threats, and apply tools, practices, and technologies to address security breaches and network vulnerabilities. The course also focuses on responding to security attacks with appropriate mitigation techniques and developing comprehensive postmortem security incident reports to enhance network defense strategies. Prerequisite: None. (Lect./ Lab/ Total; 40 Hrs./20 Hrs./ 60 Hrs.)

Information Security: Cyber Security (ITCS-402)

This advanced-level course explores information security's fundamental goals and principles, emphasizing availability, integrity, accuracy, and confidentiality. Students will comprehensively understand cybersecurity terminology, identify vulnerabilities and exposures, and learn to apply

effective countermeasures. Topics include network hardware and software security, physical security measures, encryption, backup procedures, firewalls, and protection against malicious software. The course also addresses the importance of planning, administrative controls, risk management, incident response, and compliance with legal and regulatory frameworks. Emphasis is placed on developing and implementing security plans and data assurance strategies to safeguard organizational assets. By the end of this course, students will be able to identify and document security requirements for diverse systems and environments while designing and developing comprehensive security plans tailored to organizational needs. They will create data assurance plans and implementation policies to safeguard information assets and explain the role of operations and administration in enforcing security policies. Students will learn to conduct security audits, emphasize the importance of ongoing testing and monitoring, and apply risk management principles to develop strategies for incident response and business continuity. Additionally, they will design and implement security training and awareness programs and demonstrate an understanding of legal and regulatory compliance standards essential in cybersecurity practices. Prerequisite: None. (Lect./ Lab/ Total; 50 Hrs./ 20 Hrs./ 70 Hrs.)

Ethical Hacking and Penetration Testing (ITCS-501)

This advanced course provides students with the knowledge and practical skills to identify, analyze, and exploit vulnerabilities in computer networks, infrastructure, and applications. The course emphasizes hands-on learning, guiding students through ethical hacking techniques, penetration testing methodologies, and advanced tools to evaluate system security. Students will also explore legal, moral, and professional issues associated with penetration testing and learn how to provide actionable recommendations for mitigating identified risks. By the end of this course, students will be able to apply advanced penetration testing methodologies to identify vulnerabilities in computer systems and networks, demonstrating proficiency in using industry-standard tools and techniques for ethical hacking and security testing. They will analyze and interpret penetration test results to assess potential risks and threats, developing comprehensive reports with actionable recommendations for risk mitigation. Students will also gain a thorough understanding of the legal and ethical standards governing penetration testing and implement strategies to secure systems against common vulnerabilities and attack vectors, ensuring a robust defense against potential attacks. **Prerequisite:** None. (Lect./ Lab/ Total; 40 Hrs./20 Hrs./ 60 Hrs.)

Incident Response and Malware Analysis (ITCS- 502)

This advanced course equips students with the foundational tools, techniques, and methodologies malware analysts use to examine and understand malicious programs. The curriculum emphasizes a two-phase approach to malware exploration: behavioral analysis and code analysis. Behavioral analysis focuses on observing a specimen's interaction with its environment, including the registry, network, and file system. Code analysis delves into the specimen's code using

disassemblers and debuggers. Students will also learn to construct secure laboratory environments for conducting malware analysis in a controlled manner. Through discussions, hands-on exercises, and case studies, the course highlights the complexities of malware analysis and provides practical skills to design and implement analytical capabilities tailored to organizational needs. By the end of this course, students will be able to perform independent malware analysis using static and dynamic techniques to uncover the behavior and intent of malicious programs. They will analyze executable formats, Windows internals, and API functions, extracting actionable intelligence from host- and network-based indicators. Students will utilize advanced methods to unpack, decrypt, or bypass anti-analysis mechanisms employed by sophisticated malware. Additionally, they will design and configure secure laboratory environments to safely and effectively conduct malware analysis while evaluating and adapting analytical techniques to address emerging malware threats and trends. Prerequisite: None. (Lect./ Lab/ Total; 40 Hrs./20 Hrs./ 60 Hrs.)

Cloud and Web Security (ITCS 503)

This course provides a comprehensive overview of the principles, practices, and technologies that secure cloud computing environments and web-based applications. It focuses on understanding security challenges and implementing robust solutions to protect sensitive data, ensure application integrity, and mitigate risks associated with cloud and web platforms. Topics include cloud security architecture, identity and access management, web application vulnerabilities, secure development practices, and compliance frameworks. Through practical exercises and case studies, students will gain hands-on experience in evaluating and enhancing cloud and web security. By the end of this course, students will be able to explain the fundamental concepts of cloud and web security, including identifying key vulnerabilities and threats. They will design and implement secure cloud architectures following industry best practices and apply identity and access management techniques to protect cloud and web resources. Students will learn to identify and mitigate web application vulnerabilities such as SQL injection, cross-site scripting (XSS), and CSRF while utilizing secure development practices throughout the web application lifecycle. Additionally, they will analyze security compliance standards and regulations for cloud and web platforms, including GDPR, HIPAA, and PCI DSS. The course will also cover conducting risk assessments, developing incident response strategies, and using security tools and frameworks to effectively monitor and secure cloud and web applications. Prerequisite: None. (Lect./ Lab/ Total; 20 Hrs./40 Hrs./ 60 Hrs.)

Cybersecurity Threat Management (ITCS-601)

This course explores the strategies, tools, and best practices to identify, assess, and mitigate cybersecurity threats in various environments. Students will learn to proactively manage risks, analyze threat intelligence, and implement effective defense mechanisms. The course covers multiple topics, including threat detection, incident response, vulnerability management, and

integrating security frameworks to protect digital assets. Through case studies and practical exercises, students will develop the skills to manage real-world cybersecurity threats and ensure organizational resilience. By the end of this course, students will understand the fundamental concepts of cybersecurity threats and their lifecycle, enabling them to analyze and interpret threat intelligence to identify potential risks. They will assess vulnerabilities in systems and applications, prioritize remediation efforts, and apply tools and techniques to detect, monitor, and respond to cybersecurity threats effectively. Students will design and implement comprehensive threat management strategies while evaluating and utilizing industry-standard frameworks such as MITRE ATT&CK and the NIST Cybersecurity Framework. Additionally, they will develop policies and procedures to enhance an organization's cybersecurity posture and collaborate effectively in incident response and threat-hunting teams. Prerequisite: None. (Lect./ Lab/ Total; 40 Hrs./40 Hrs./ 80 Hrs.)

Introduction to Cryptography (ITCS-602)

This advanced-level course provides an in-depth exploration of the principles and practices of cryptography, focusing on the design, application, and correct usage of cryptographic primitives. Students will learn about core cryptographic algorithms, protocols, and techniques that form the foundation of secure communication. Topics include encryption methods, secure hashing, key management, and algorithm selection. By studying cryptographic protocols, students will understand how to build trust in untrusted environments and ensure data integrity, confidentiality, and authenticity in real-world scenarios. By the end of this course, students will have a comprehensive understanding of both the theoretical and practical aspects of cryptographic algorithms, including encryption and secure hashing. They will be able to analyze cryptographic protocols and evaluate their importance in establishing trust and securing communications in untrusted environments. Students will also learn to apply cryptographic techniques for effective key management and select the appropriate algorithms for various scenarios. Furthermore, they will learn to design and implement secure systems by leveraging cryptographic primitives and protocols. Finally, students will critically assess the strengths and limitations of various cryptographic methods and their applicability in different real-world applications. Prerequisite: None. (Lect./ Lab/ Total; 30 Hrs./20 Hrs./ 50 Hrs.)

IT Project Management (ITCS- 701)

This advanced course provides students with the knowledge and skills to manage cybersecurity projects using project management methodologies, tools, and software. Students will develop a comprehensive cybersecurity project plan, addressing all stages of the project lifecycle, including initiation, planning, execution, monitoring, and closure. The course emphasizes the integration of cybersecurity frameworks, timelines, milestones, risk management, scheduling, and resource allocation. Through case studies and practical exercises, students will learn to manage cybersecurity-specific challenges such as compliance, incident response, and system implementation while ensuring project success. By the end of this course,

students will be able to apply project management principles to cybersecurity initiatives, develop detailed project plans using project management software, and address cybersecurity-specific challenges through frameworks like NIST, ISO 27001, and CIS Controls. They will utilize scheduling, cost estimation, risk analysis, and stakeholder communication techniques to manage projects effectively. Students will monitor progress, manage risks, and ensure compliance with security and regulatory requirements. Finally, they will demonstrate the ability to close projects successfully, ensuring deliverables meet scope, quality, and security objectives. Prerequisite: None. (Lect./ Lab/ Total; 40 Hrs./ 40 Hrs./ 80 Hrs.)

Cybersecurity Capstone (ITCS- 702)

The Cybersecurity Capstone course is an advanced-level, hands-on course designed to provide students with practical experience in solving complex cybersecurity problems. The course requires students to complete a class project that involves analyzing networked systems through packet captures, NetFlow, and log data. Students will work on an investigation problem that demands critical thinking and applying skills learned throughout the cybersecurity program. The project will challenge students to define data, identify appropriate data types, assess and collect data, and generate reports based on their findings. The course emphasizes using industry-standard tools for data collection, analysis, and reporting, ensuring students gain real-world experience in solving cybersecurity issues and producing final deliverables. By the end of this course, students will be able to define data requirements for investigating cybersecurity incidents and identify various data sources such as packet captures, NetFlow's, and log data to support problem resolution. They will analyze and assess data effectively using a range of tools and techniques, including network analysis tools like Wireshark, NetFlow analyzers, and SIEM systems. Students will also construct and deliver comprehensive reports summarizing investigation outcomes, conclusions, and recommendations. They will demonstrate the ability to address multi-faceted problems involving networked devices and cybersecurity threats, apply cybersecurity principles to identify vulnerabilities, detect intrusions, and mitigate risks, and develop a strong understanding of the data-driven decision-making process in incident response and reporting. Prerequisite: None. (Lect./ Lab/ Total; 30 Hrs./ 40 Hrs./ 70 Hrs.)

Associate in Applied Science in Healthcare Information Technology (AASHIT)

- ComTIA +

ENGL 101 English Composition I

This course provides knowledge on the fundamentals of the writing process and helps students learn how to use writing to gain knowledge, communicate, and analyze ideas. Students will be prepared for brainstorming, forming outlines, and researching ideas. Opportunities will also be given to create initial drafts and engage in revising and editing processes. Students will explore

various elements of writing, including the author's purpose, voice, audience, and writing style.
Course Length: [Lec/Lab/Ext/Total: 50/20/00/70]

Prerequisite: None

SOCL 101 Introduction to Sociology

This introductory sociology course offers an in-depth exploration of the core concepts, theories, and methods used in the field of sociology. Students will investigate how social structures, institutions, and interactions shape individual behaviors and broader societal trends. Key areas of focus include analyzing social issues from a sociological perspective, understanding basic research methodologies, and fostering critical thinking to navigate the complexities of social life. Through the course, students will gain a solid foundation in understanding the ways in which social forces influence everyday experiences and contribute to societal dynamics.

Course Length: [Lec/Lab/Ext/Total: 50/20/00/70]

Prerequisite: None

MATH 101 Mathematics

Topics include introductory problem-solving and critical thinking, treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications, and number sense, proportional reasoning, estimation, technology, and communication skills embedded throughout the course. Additional topics may be covered.

Prerequisite: None

Course Length: [Lec/Lab/Ext/Total: 50/20/00/70]

BIOL 101 Medical Anatomy and Physiology

This course is a study of human anatomy and physiology. Lectures systematically take the student from the microscopic level through the formation of organ systems, emphasizing the interdependence of these systems. Functional concepts and internal structure are related to surface anatomy as a basis for performing a physical examination. The physiology lectures will provide the overall physiology of the human body but will also relate how physiology breaks down or malfunctions in times of infection, disease, trauma, and aging.

Upon completing this subject, students will be able to recall the organ systems of the human body and describe how each system is interdependent. They will be able to describe the aging process and how physiology breaks down or malfunctions due to infection, disease, trauma, and aging.

Prerequisite: None

Course Length: [Lec/Lab/Ext/Total: 10/40/00/50]

BIOL 102 Medical terminology

This course studies the medical vocabulary system specifically for Pharmacy Technicians. It includes structure, recognition, analysis, definition, spelling, pronunciation, and combination of medical terms from prefixes, suffixes, roots, and combining forms. Upon completion of this subject, students will be able to recognize, pronounce, and define medical terms common to the pharmacy practice used to for various human organs.

Prerequisite: None

Course Length: [Lec/Lab/Ext/Total: 10/40/00/50]

HITP 101 The Profession and Role of Pharmacy Technicians, Drugs & Administration

This subject orients students to the work of pharmacy technicians and the context in which a technician's job is performed. Students are introduced to the profound influence that drug laws, standards, and regulations have on pharmacy practice and will learn to abide by those laws, regulations, and standards when preparing and dispensing drugs. Additionally, students will be introduced to define the term "drug" and distinguish between over the counter (OTC) and legend drugs. Moreover, the course covers the methods to identify the parts of a National Drug Code (NDC) number and; categorize drugs by source and the uses of drugs.

Upon completing this subject, students can relate the concept of pharmaceutical care and the technician's general role in its delivery AND Administration. They will be able to discuss the development of new drug products and various issues that touch on attitudes, values and beliefs of success for pharmacy technicians. Students will also be able to state the history of federal drug law in chronological order, define the role of the FDA reporting process of adverse reactions and explain the necessary forms and regulations for controlled substances. Additionally, students will be able to elaborate on the importance of obtaining Pharmacy Technician Certification Board (PTCB) certification and the benefits of active involvement in local, state, and national pharmacy organizations.

Upon completion of this course, students will be able to define and differentiate between the terms dose form and delivery system and elaborate on the advantages and disadvantages of each. Students will also learn about the various reference texts commonly used in a pharmacy and be able to describe their use and purpose. Students will learn the different routes of drug administration and be able to identify factors that can influence the route of administration and define the terms local use and systemic use; these uses are considered when a prescriber selects a particular drug for a specific patient. Students completing this subject will be able to list the major routes of drug administration and the advantages and disadvantages associated with each dose form and delivery system and discuss correct techniques for the administration of oral, topical and parenteral dose forms, including IV, IM, ID, and subcutaneous forms of drug administration.

Course Length: [Lec/Lab/Ext/Total: 50/40/00/90]
Prerequisite: None

HITP 102 Basic Pharmaceutical Measurements and Calculations

This subject introduces students to the measurement systems used in the pharmacy and the calculations they may be required to perform as a Pharmacy Technician. Upon completion of this subject, students will be able to describe the four systems of measurement commonly used in a pharmacy and be able to convert units from one system to another. They will gain an understanding of prefixes used in the metric system and will be able to explain those meanings. They will learn to convert from one metric unit to another, from Roman numerals to Arabic numerals, and distinguish between proper, improper, and compound fractions. Students will perform basic operations with fractions, including finding the least common denominator, converting fractions to decimals, and adding, subtracting, multiplying, and dividing fractions. They will become proficient in performing basic operations with proportions, including identifying equivalent ratios and finding an unknown quantity in a proportion, converting percentages to and from fractions and ratios, and converting percentages to decimals. They will perform elementary dose calculations and conversions, solve problems involving powder solutions and dilutions, and learn to use the allegation method.

Course Length: [Lec/Lab/Ext/Total: 45/50/00/95]
Prerequisite: None

HITP 103 Hospital Pharmacy, Prescription Orders, and Medication Safety

This course is the continuation of basic pharmaceutical measurements and calculations that expands on skills previously learned in PT 103. This subject also introduces the student to various proficiencies required in an institutional pharmacy practice environment. In addition, the course is designed to provide an appreciation for medication safety by learning the extent and possible effects of medication errors on patient health and safety. Upon completion of this course, students will gain competencies in the following sectors.

After this course, students will learn how to interpret medication orders and labels, calculate solid oral doses and dosages, liquid oral and parenteral medications, and reconstitute powders and crystals into liquid medications. Upon completing this subject, students can interpret medication orders and calculate solid and liquid medications. They will also be able to reconstitute powders and crystals into liquid medicines.

Upon completing this course, students can describe the various inpatient drug distribution systems, explain the proper procedure for repackaging medications, identify the medication dispensing process, and describe specialty services such as intravenous admixtures and total parenteral nutrition. The institutional pharmacy practice setting is very different from the retail environment. Students will be able to describe the various roles of clinically trained pharmacists

in the institution, describe the functions of a drug information center, and discuss the origins and purpose of the institution's formulary. They will also be able to discuss the role of automation and inventory control in the institution, describe the classifications and functions of an institution, identify the roles of major institution committees, and list standard universal precautions to protect institution employees. Students will learn about the germ theory of disease— the role of pathogenic organisms in causing disease. Students will learn to distinguish various viruses, bacteria, fungi, and protozoa and will be able to discuss the advantages and disadvantages of various forms of sterilization. They will be able to identify sources and prevent common causes of contamination, describe proper aseptic techniques, including horizontal and vertical laminar airflow hoods, and discuss the new United States Pharmacopeia requirements. Students will be able to discuss the importance of and strategies for handling and disposing of hazardous agents. They will also learn how to do special medication calculations commonly used in institutions. Upon completing this subject, students can calculate medications for special populations based on body weight and patient age. They will also learn to calculate medication dosages measured in percent of concentration, milliequivalents, and units. Additionally, they will learn to calculate mixtures from institutional stock medications and how to interpret physicians' orders for dosages.

Additionally, after completion of this course, students will gain an appreciation for medication safety by learning the extent and possible impact of medication errors on patient health and safety. They will be able to describe how and to what degree medication errors contribute to medical errors, list examples of medication errors commonly seen in the practice settings, apply a systematic evaluation of opportunities for a medication error to a pharmacy practice model, and identify the common reporting systems available for reporting medication errors.

Course length: Lec/lab/Work based/Total : 40/40/00/80

Prerequisites: Medical Terminology, Basic Pharmacology or equivalent

HITP 104 Pharmacology and Dispensing of Drugs Coding Reimbursement

This subject introduces students to prescription medications used in treating nervous system diseases and psychiatric disorders. This subject is the first in the series of subjects on therapeutic agents. It also introduces students to the role of the FDA in regulating herbal products and dietary supplements which students will be able to describe once they have completed this subject. This course also introduces students to duties and responsibilities in a community pharmacy. The course helps become proficient in performing and be able to recall the typical duties of pharmacy technicians in dispensing over the counter and prescription drugs. A coverage of pharmacy inventory will assure comprehension and skill in performing procedures for inventory management, including purchasing, receiving, and storage of prescription and over-the-counter drugs.

Upon completion of this course, students will be able to classify drugs by major classifications, drug actions and reactions and will learn to use drug reference materials usually found in the

pharmacy practice. They learn to identify and will be able to describe the use and side effects of prescription medications, nonprescription medications, and alternative therapies commonly used to treat diseases affecting the nervous system and psychiatric disorders. To achieve this, they first need to master basic anatomy and the physiology of the nervous system. They then learn the therapeutic effects of prescription medications, nonprescription medications, and alternative therapies commonly used to treat diseases affecting the nervous system, including psychiatric disorders, and their adverse effects. Students will learn to recall these medications by brand and generic name, standard pronunciation, and dosage forms, and routes of administration. They will also learn abbreviations and be able to recall the terms associated with medication therapy for common diseases affecting the nervous system and psychiatric disorders.

After this course, the students will be able to explain the typical procedures for receiving and reviewing prescriptions, describe the parts of a prescription and of a typical prescription label, describe the parts of a patient profile, and detail the steps required to prepare, check, and/or update a patient profile. Students will become familiar with the computer system and will be able to explain the parts of a computer system. They will learn about third-party benefit insurance and claims adjudications and will be able to explain each. They will be able to explain the alternatives for third-party administration, define and explain the terms prescription benefits manager and tiered co-pay, and discuss drug coverage for Medicaid and Medicare patients. Students will also become proficient in complying with procedures for the purchasing, receiving, storage and inventory control of controlled- drug substances. They will learn to calculate inventory turnover, markup, and markup rate, apply average wholesale price to profit calculations, and be able to compute discounts accurately.

Course Length: Lec/Lab/Ext/Total: 30/60/00/90

Prerequisite: HITP102

HITP 105 Pharmaceutical Compounding

Pharmacy compounding is a time-honored practice that lies at the heart of personalized medicine. It involves the preparation, mixing, assembling, packaging, and labeling of medications tailored to meet the specific needs of individual patients. Designed for pharmacy technicians, healthcare students, and professionals, this course provides foundational knowledge and hands-on training aligned with **USP <795>**, **<797>**, and **<800>** guidelines. Through a combination of theoretical instruction, real-world scenarios, and practical assignments, participants will gain the confidence and competence needed to contribute meaningfully to modern pharmacy practice.

Course Length: [Lec/Lab/Ext/Total: 50/20/00/70]

Prerequisite: HIT101P; HIT102P; HIT103P; HIT104P

HITB 101 Electronic Medical Records [EMR] Theory & Electronic Health Record (EHR)

Theory

This course includes the concepts of software applicable to health care, including the Electronic Medical Record (EMR) System. This course introduces the basic features of selected software, terminology related to hardware, software, and uses for patience. In addition, the course is designed to teach effective electronic health record (EHR)-based training interventions through simulation, which emphasizes learning actual tasks through experimentation in a risk-free environment without negative patient outcomes. This training improves EHR use and enhances healthcare providers' skills and behaviors. It further studies case-by-case documents related to increased adverse patient safety issues due to the EHR-user interface.

Upon completion of this course, students will learn how to communicate as an effective partner in a healthcare team, manage patient-specific data to protect patient confidentiality and privacy and learn the skills to navigate an electronic health record system to protect confidentially work in various healthcare settings.

Course Length: [Lec/Lab/Ext/Total: 30/60/00/90]

Prerequisites: None

HITB 102 Insurance Billing - Reimbursement using Software and HIPPA Compliance

This course provides a comprehensive and practice-oriented approach to medical insurance billing and reimbursement processes, using industry-standard billing software and integrated electronic health records (EHR) systems. Students will gain in-depth knowledge of commercial and government insurance programs, including Medicare, Medicaid, TRICARE, and managed care plans, and learn to navigate complex reimbursement processes across various payer types. The course also provides an in-depth exploration of the Health Insurance Portability and Accountability Act (HIPAA), focusing on:

HIPAA Titles I and II, privacy and security rules, HITECH Act, and the role of covered entities and business associates.

Data encryption, access control, breach notification protocols, and audit preparedness.

Implementing HIPAA-compliant workflows in electronic systems to safeguard patient health information (PHI).

Program Length: Lec/lab/Work based/Total : 40/60/00/100

Prerequisites: BIOL 10; HITB 103

HITB 103 Medical Billing & Diagnostic and Procedural Coding

This course identifies elements of the revenue cycle as it relates to inpatient and outpatient reimbursement, insurance procedures, and Medicare regulations. The focus is on disease and procedural coding for the IPPS, DRG, APC, and UHDDS definitions, guidelines, conventions, and correct sequencing for optimal reimbursement. Moreover, this teaches students the theory and practice of medical coding for professional services, procedures, and supplies using CPT

(Current Procedure Terminology) and Healthcare Common Procedure Coding System (HCPCS) Level II system and modifiers.

Upon completion of this course students will be able to apply coding conventions and guidelines and follow instructional notes for professional provider evaluation and management & surgical cases. In addition to radiology, laboratory, and anesthesia reports, outpatient medical records and scenarios will be utilized to access student knowledge and ability to apply NCCI edits. After this course, the student will have advanced working knowledge of using various billing software programs and identifying the essential elements of insurance plans.

Program Length: Lec/lab/Work based/Total : 50/20/00/70

Prerequisite: HITB 103

HITB 104 ICD-10-CM/10PCS Coding and Inpatient Reimbursement Methodology

It also describes the basics of the ICD-10-CM diagnostic classification system, including its history, current purposes, and future implications, including the basics of ICD-10-CM, current Purposes, and future impacts on healthcare finance in the United States. Furthermore, it teaches to recognize ICD-10-CM diagnosis codes and use code reference books to verify their appropriate use and to recognize ICD-10-PCS. Moreover, this course teaches the student to demonstrate the use of the ICD-10- CM/10PCS book and CPT book. This further illustrates how to code different procedures and diagnoses related to body systems, use different modifiers, and code Evaluation and Management, Anesthesia, Pathology, Laboratory, Radiology, and Medicine; it also demonstrates proper procedures for reimbursement methodologies and coding for medical necessity.

Course Length: Lec/Lab/Ext/Total: 30/60/00/90

Prerequisite: 104B; 103B

HITT 101 Healthcare Information Technology

This course is designed to teach students basic information about computer applications, including Microsoft Office and the basic operating system. Furthermore, it introduces a computer to create, edit, save, and customize Word documents, attach a document, screen share screenshots, and create PowerPoint slides. It also teaches basic computer operating systems and implements professional computing and careers, including email systems such as Outlook and the use of Excel for billing matters. Moreover, it also includes theory and practice in specific AWS networking concepts & Health Information Exchange which includes analysis of data mobility, including the hardware infrastructure (wireless and devices supporting them), the ISO stack, standards, Internet protocols, federations, and grids, the NHIN, and other nationwide approaches.

End-of-Course Outcomes: Explain the functions of all layers of the ISO OSI models. Recommend components of networking hardware. Analyze standards associated with the

EHR/PHR functional models. Explain the process and value of EHR certification. Describe data standards required for the interoperable exchange of health care data, including terminology, data elements, document standards, imaging standards, and medical device standards. Describe federal and state health IT standards and components. Examine additional standards related to shared and effective use of data, including clinical decision support. Describe enterprise architecture models.

Course Length: Lec/Lab/Ext/Total: 50/40/00/90

Prerequisite: 104B; 103B

HITT 102 Digital Data Transformation & Health Informatics

This course takes on a journey through the health informatics world, integrating foundational theories with real-world applications. The initial segment of the course guides students through the discipline's major cornerstones, examining what information is and why computer science is important, along with insights gained from cognitive science and the ethical and legal considerations that guide modern healthcare. This module of the course is a foundation which demonstrates how the various knowledge domains intersect to create a comprehensive understanding of health informatics. Further, the course then dives into the intricacy of selecting and applying information systems, offering a comprehensive examination of the systems development life cycle and human-technology interaction. Students will learn about the practical uses of informatics in care provision, such as the use of electronic health records, patient safety systems, and population health promotion initiatives. The course then covers more complex topics such as data mining, using research evidence, and even bioinformatics, finishing with a gaze into the future of patient-centered care in ever more technologically sophisticated environments. This program will equip students with the technical ability and the critical thinking ability for fostering innovation in the healthcare sector.

Course Length: Lec/Lab/Ext/Total: 40/60/00/100

Prerequisite: 104B; 103B

HITT 103 Healthcare Data analytics and Cyber Security

This course is designed to describe the structure and function of healthcare delivery systems, differentiate between patient-record formats, and explain the key components and workflows of Electronic Health Records (EHRs). The course teaches to apply documentation standards to ensure accuracy and compliance, demonstrate understanding of privacy and security regulations including HIPAA, and recognize legal and ethical responsibilities in managing health information. Students will analyze basic coding practices, evaluate information systems and workflows, and integrate best practices to manage the full lifecycle of health information across clinical and administrative settings, preparing them for effective real-world application in health information management.

Course Length: Lec/lab/Work based/Total: 25/80/00/105
Prerequisites: HITT102

HITB 106 Capstone project
In this course students will be able to understand all the concepts and skills learned in previous courses in further deeper level. Furthermore, they will be able to implement their understanding to solve the various cases and issues in Medical Billing and coding field. Students prepare in depth to find strategy to pass for License Exam Prep for CPB and CPC.
Prerequisite: All regular courses
Course Length: Lec/lab/Work based/Total: 20/90/00/110

Sterile Processing Technician

Foundation Sterile Processing [SPTech 101]:
This course will serve as an introduction to the systems of the human body. Necessary life functions and survival needs will be examined, followed by an orientation of the language of anatomy. This course Introduces the student to the structure of medical terms with emphasis on using and combining the most common prefixes, roots, and suffixes. Includes terms related to major body systems, oncology, surgery, as well as clinical laboratory and diagnostic procedures and imaging Thorough analyses of intracellular function, tissue types, the integumentary system, skeletal tissue and the human skeleton, joints, muscle tissue and the muscular system, the fundamentals of nervous tissue, the nervous system, and the endocrine system will follow. learn the most used medical abbreviations related to anatomical directions and medications and symbols. This course is further designed to teach the basics of Infection control & microbiology basics – how contamination happens and how to prevent including to convey general concepts, methods, and applications of microbiology, immunology, bacteriology, virology, biochemistry, and physiology of microorganisms including bacteria, viruses, and fungi; the diseases caused by these microorganisms and their treatments. This course provides the student with a deeper understanding of legal and ethical issues in healthcare. Students explore the legal, ethical and moral dilemmas currently faced by healthcare professionals, and identify issues related to potential legal liability in the workplace. Prerequisite: None; lec/lab/clinical/Total; [204/16/24/244]
Course Objectives
By the end of this course, students will be able to:

15. **Interpret and use basic medical terminology** relevant to sterile processing, surgical procedures, and healthcare communication.
16. **Describe the structure and function of the human body systems**, focusing on anatomical regions and organs commonly involved in surgical procedures.

17. **Identify key concepts of microbiology**, including types of microorganisms, modes of transmission, and the conditions that support microbial growth.
18. **Explain the chain of infections and the role of sterile processing** in breaking that chain to prevent healthcare-associated infections (HAIs).
19. **Apply infection control and prevention principles**, including standard and transmission-based precautions, aseptic techniques, and environmental controls.
20. **Recognize the relationship between human anatomy, surgical procedures, and instrument selection**, supporting safe and effective surgical preparation.
21. **Demonstrate an understanding of how microbiology, anatomy, and infection control intersect** to guide best practices in sterile processing environments.

Practice of Sterile Processing [SPTech 102]

The Practice of Sterile Processing course provides an in-depth exploration of the essential processes and responsibilities within the sterile processing field. This course equips students with the technical skills and knowledge needed to ensure cleanliness, disinfection, sterilization, and safe handling of surgical instruments and medical devices. Students begin by learning the principles of decontamination, including the proper handling and transportation of soiled instruments and the use of manual and mechanical cleaning techniques. Emphasis is placed on using personal protective equipment (PPE) and strict infection control measures. The course then covers disinfection, guided by the Spaulding classification system, where students learn how to select and use high-, intermediate-, and low-level disinfectants and understand the chemical handling protocols necessary for workplace safety.

Students also comprehensively understand surgical instruments, including their types, functions, identification, inspection, and maintenance. They learn to assemble basic and specialty instrument sets and prepare them for sterilization using packaging materials like peel pouches, wraps, and rigid containers, applying chemical indicators and correct labeling techniques. The course introduces point-of-use disinfection, where learners practice pre-cleaning instruments immediately after using surgical settings and coordinate with the operating room for timely instrument processing. Special attention is given to complex instrumentation such as robotic, endoscopic, and laparoscopic tools, focusing on disassembly, functional testing, and following manufacturers' instructions for use (IFUs). In hands-on lab sessions, students work with heat-sensitive devices, applying high-level disinfection or low-temperature sterilization techniques using peracetic acid or hydrogen peroxide systems. They also study and operate high-temperature sterilization methods like autoclaves, learning about cycle parameters, troubleshooting, and load configurations.

The course further explores sterile storage and transport, including best practices for maintaining sterility during storage, shelving, labelling, and distribution. Students learn monitoring and

record-keeping procedures, using biological, chemical, and mechanical indicators, and maintaining logs for regulatory compliance. Emphasis is also placed on quality assurance, with students introduced to internal audits, corrective actions, and continuous improvement using Lean and Six Sigma concepts. The final component covers supply chain management, where students learn about inventory control, receiving and distributing sterile items, and using tracking systems for restocking. In the culminating lab sessions, students perform instrument wrapping, packaging, autoclave operation, and validation, bringing all learned concepts into real-world practice. By the end of the course, students will be fully prepared to support surgical teams by ensuring the availability of safe, sterile instruments and equipment.

Prerequisite: SPTech 101; Lec/lab/Clinical/Total: [200/52/40/292]

Course Objectives

By the end of this course, students will be able to:

15. **Demonstrate proper procedures for decontaminating soiled medical and surgical instruments**, including safe transport, manual cleaning, and the operation of mechanical cleaning equipment.
16. **Apply infection control principles and standard precautions**, including appropriate use of personal protective equipment (PPE) and adherence to regulatory guidelines for safety and cleanliness.
17. **Differentiate between disinfection levels (high, intermediate, low)** and select appropriate chemical disinfectants based on device classification and intended use.
18. **Identify and classify a variety of surgical instruments**, describing their structure, function, and maintenance requirements.
19. **Assemble, prepare, and package instrument trays and individual devices** using industry-standard materials such as peel pouches, sterilization wraps, and rigid containers.
20. **Perform point-of-use cleaning and disinfection procedures**, including using enzymatic sprays and communication protocols with operating room personnel.
21. **Reprocess complex instrumentation**, including robotic, laparoscopic, and endoscopic devices, according to the manufacturer's instructions for use (IFUs).
22. **Distinguish between high-temperature and low-temperature sterilization methods**, and operate equipment such as steam autoclaves, hydrogen peroxide gas plasma, and peracetic acid systems.
23. **Process heat-sensitive devices using validated disinfection or low-temperature sterilization methods**, ensuring effectiveness without compromising device integrity.
24. **Maintain sterility through proper storage and transportation of reprocessed instruments**, including inventory labeling, shelving practices, and handling protocols.

25. **Utilize biological, chemical, and mechanical indicators to monitor sterilization effectiveness**, and maintain accurate records in compliance with healthcare regulations.
26. **Implement quality assurance practices and internal audit procedures** to support continuous improvement and regulatory compliance within sterile processing operations.
27. **Manage sterile supply inventory**, including receiving, stocking, restocking, and using tracking systems to ensure availability and traceability of sterile instruments.
28. **Demonstrate proficiency in practical skills through laboratory exercises**, including packaging, wrapping, operating sterilizers, and validating sterilization processes.

Sterile Processing Techniques [SPTech 103]

The Sterile Processing Techniques course introduces students to the essential functions and responsibilities within a sterile processing department (SPD), focusing on best practices, teamwork, and communication in healthcare environments. The course explores the role of sterile processing technicians in preventing infection and supporting patient care by ensuring that medical and surgical instruments are properly cleaned, packaged, sterilized, and distributed. Students will understand how SPDs function as a vital part of the healthcare delivery system.

A key component of this course is the development of practical communication skills, including clear and professional interactions with surgical teams, nursing staff, and other departments. Emphasis is placed on terminology, documentation, and collaboration across shifts and departments to ensure safe, consistent instrument processing and delivery.

The course includes two hands-on lab components. In the first lab, students complete a quiz on basic sterile processing methods to assess their understanding of core principles such as infection control, instrument handling, and sterilization techniques. In the second lab, students perform wrapping and packaging exercises, practicing proper techniques using various materials, including wraps, peel pouches, and rigid containers. These sessions help reinforce practical skills and prepare students for real-world applications in clinical settings. Prerequisite: SPTech102: Lec/lab/Clinical/Total: [264/60/40/364]

Course Objectives:

By the end of this course, students will be able to:

9. **Explain the role and responsibilities of a sterile processing technician** within the healthcare environment and describe how the sterile processing department (SPD) supports infection prevention and patient care.
10. **Demonstrate a clear understanding of the instrument reprocessing cycle**, including cleaning, disinfection, packaging, sterilization, and distribution.
11. **Apply best practices in sterile processing**, including proper instrument handling, adherence to infection control protocols, and compliance with regulatory standards.

12. **Communicate effectively and professionally** with surgical teams, nurses, and other healthcare staff using appropriate terminology and documentation procedures.
13. **Collaborate across departments and shifts**, demonstrating teamwork and accountability to support safe and timely instrument delivery.
14. **Complete a quiz assessing knowledge of basic sterile processing methods**, including infection prevention, types of sterilization, and safety measures.
15. **Demonstrate proper wrapping and packaging techniques** using sterilization wraps, peel pouches, and rigid containers while appropriately applying internal and external indicators.
16. **Develop the practical skills necessary for entry-level roles in sterile processing**, confidently applying classroom knowledge to real-world clinical situations.

Physical Therapy Technician
Program Curriculum

The Physical Therapy Technician program is organized into seven instructional modules designed to provide students with the knowledge, hands-on skills, and professional preparation needed for entry-level employment in physical therapy, rehabilitation, and related healthcare settings. The module sequence begins with foundational topics such as the physical therapy profession, rehabilitation support, communication, medical terminology, anatomy, physiology, and common medical conditions. It then progresses into safety, infection control, patient care support, positioning, transfers, ambulation, therapeutic exercise, physical therapy modalities, legal and ethical responsibilities, and professional conduct. The final module emphasizes career preparation, certification review, lab review, procedure evaluation, and skills checkoff.

Course Module Descriptions

PTT101: Introduction to Physical Therapy, Rehabilitation Support, Communication, and Medical Terminology

This module introduces students to the physical therapy profession and the role of the Physical Therapy Technician/Aide in rehabilitation and patient support settings. Students will learn about the purpose of physical therapy, career opportunities, the rehabilitation team, professional expectations, scope of practice, task limitations, workplace behavior, and effective communication with patients and healthcare team members. The module also introduces medical terminology and the medical record, including prefixes, suffixes, root words, abbreviations,

directional terms, body-system terminology, movement terms, treatment terms, and documentation vocabulary used in physical therapy settings. Students will also receive an overview of Certification expectations. **Prerequisite:** None. **[Lec/Lab/Ext/Total: 68/12/00/80]**

PTT102: Anatomy, Physiology, Musculoskeletal Systems, and Common Medical Conditions

This module provides foundational instruction in the structure and function of the human body as it relates to physical therapy and rehabilitation care. Students will study basic anatomy and physiology, body organization, anatomical position, body planes, body regions, homeostasis, and the relationship between body systems and physical function. The module emphasizes applied anatomy and physiology of the musculoskeletal system, including the human skeleton, major muscles, joints, functional movement, range of motion, and movement terminology. Students will also study common medical disorders treated through physical therapy, including musculoskeletal, neurological, cardiopulmonary, and functional conditions, as well as inflammation, healing, pressure injuries, abnormal patient responses, and reporting responsibilities. **Prerequisite:** PTT101. **[Lec/Lab/Ext/Total: 104/16/00/120]**

PTT103: Administrative Duties, OSHA, Infection Control, Safety, and Patient Care Support

This module introduces students to the administrative, safety, infection control, and patient care support responsibilities of the Physical Therapy Technician/Aide. Students will learn about clinic flow, scheduling, patient intake, customer service, medical records, charting, SOAP note awareness, electronic health records, billing and insurance processing awareness, and reporting patient observations. The module also covers safety in the working environment, OSHA-related safety expectations, infection control principles, standard and universal precautions, hand hygiene, PPE use, cleaning and disinfecting treatment areas and equipment, biohazard safety, environmental safety, fall prevention, emergency procedures, first-aid awareness, CPR awareness, and basic patient preparation and care support duties. **Prerequisite:** PTT102. **[Lec/Lab/Ext/Total: 62/18/00/80]**

PTT104: Patient Preparation, Positioning, Transfers, Body Mechanics, and Wheelchair Skills

This module focuses on hands-on patient preparation and safe patient-assistance skills used in physical therapy and rehabilitation settings. Students will learn how to prepare treatment areas, assist with patient preparation, maintain patient privacy and dignity, support patient comfort and safety, and assist with turning, positioning, and draping. The module also teaches proper body mechanics, safe lifting, bed mobility, transfer principles, sit-to-stand transfers, bed-to-wheelchair transfers, wheelchair parts and safety, wheelchair positioning, wheelchair mobility basics, fall-risk awareness, and fall-prevention strategies. Emphasis is placed on safe practice, injury prevention, and performing duties under appropriate supervision. **Prerequisite:** PTT103. **[Lec/Lab/Ext/Total: 54/26/00/80]**

PTT105: Ambulation, Gait Training, Assistive Devices, Therapeutic Exercise, and Mobility Support

This module introduces students to ambulation, gait training, assistive devices, therapeutic exercise, and mobility support activities used in physical therapy settings. Students will learn normal and abnormal gait, gait cycle basics, balance, coordination, ambulation-related activities, use of gait belts, canes, crutches, walkers, parallel bars, weight-bearing terminology, stair safety, turning, and mobility safety. The module also covers therapeutic exercise principles, active range of motion, passive range of motion, active-assistive range of motion, strengthening, stretching, flexibility, coordination activities, endurance training, exercise safety, contraindication awareness, patient monitoring, and documentation of completed activities within the Physical Therapy Technician/Aide role. **Prerequisite:** PTT104. **[Lec/Lab/Ext/Total: 54/26/00/80]**

PTT106: Therapeutic Modalities, Physical Agents, Specialized Procedures, Law, Ethics, HIPAA, and Professional Conduct

This module introduces students to selected therapeutic modalities, physical therapy agents, specialized clinical procedures, and the legal and ethical responsibilities of the Physical Therapy Technician/Aide. Students will learn the purpose and safety considerations of heat therapy, cold therapy, cryotherapy, superficial heat, deep-heat awareness, modality setup and cleanup support, equipment safety, skin inspection, contraindication and precaution awareness, patient response monitoring, role boundaries, and reporting adverse reactions. The module also covers ethical and legal issues, HIPAA, confidentiality, patient rights, informed consent awareness, cultural sensitivity, diversity, professional boundaries, delegation, supervision, scope of practice, ethical decision-making, and professional conduct in physical therapy and rehabilitation settings. **Prerequisite:** PTT105. **[Lec/Lab/Ext/Total: 63/17/00/80]**

PTT107: Career Preparation, Lab Review, Procedure Evaluation, and Skills Checkoff

This module provides final career preparation, certification review, lab review, procedure evaluation, skills checkoff, and program completion activities. Students will prepare for entry-level employment through resume preparation, cover letter development, interview skills, job search strategies, employer expectations, workplace professionalism, and certification next-step planning. Students will review Certification exam domains, including patient care and administrative duties, therapeutic modalities, medical terminology, anatomy and physiology, medical law and ethics, patient preparation and positioning, and OSHA/infection control. The module includes mock certification-style questions, practice evaluation testing, procedure evaluations, lab review stations, skills remediation, final written examination, final practical skills evaluation, and optional externship or work-based observation when available and approved. **Prerequisite:** PTT106. **[Lec/Lab/Ext/Total: 110/10/00/120]**