

DEPARTMENT OF HEALTH PROFESSIONS

330-941-3327

The department offers certificate, associate, baccalaureate, and master's degree programs for future members of the health care delivery and public health professions.

Associate programs are offered in:

- Medical Laboratory Technology*

Baccalaureate programs are offered in:

- Dental Hygiene*
- Didactic Program in Dietetics
- Exercise Science
- Medical Laboratory Science*
- Respiratory Care*

Online Undergraduate Degree Programs

- Allied Health Completion Program (BSAS)
- Public Health (BSAS)
- Respiratory Care Completion Program (BSRC)

Certificate programs are offered in:

- Polysomnography

Minors are offered in:

- Minor in Public Health
- Minor in Wellness

Master's degree programs are offered in:

- Respiratory Care

* There is a restriction on the number of students that can be accepted into the following programs since only a limited number of students can be accommodated: Medical Laboratory Science and Medical Lab Technology, Dental Hygiene, and Respiratory Care. Detailed information on admission criteria and closing dates for applications are available in the Department of Health Professions, the Bitonte College of Health and Human Services Dean's Office, or the Admissions Office.

Important Notice

Fingerprinting, a criminal background check, record of up to date immunizations, and drug testing may be required as a condition for working with a variety of sites used by programs offered in this department. Some sites used by programs offered in the department require that a person have no felony convictions, have certain immunizations, and have passed a drug test within the past year. Students unable to meet these site requirements may not be able to complete their degree from the department. If you have questions concerning these requirements, please see an advisor in the department.

Chair

Joan O'Connell, M.S., Associate Professor, Chair

Professor

Kelly Colwell, Ed.D., Associate Professor

Debbie Juruaz, D.D.S., Professor

Diane P. Kandray, Ed.D., Professor

Sara Michaliszyn, Ph.D., Associate Professor

Matthew R. O'Dell, M.B.A., Assistant Professor

Ruth Palich, M.H.H.S., Assistant Professor

Jennifer Pintar, Ph.D., Professor

Nicolette Powe, Dr.P.H., Associate Professor

Amanda Roby, M.H.H.S., Associate Professor

Salvatore Sanders, Ph.D., Professor

Tyler J. Singer, Ph.D., Assistant Professor

Suzanne Smith, M.Ed., Associate Professor

Silvia Stefan, Ed.D., Assistant Professor

Daniel J. Van Dussen, Ph.D., Professor

Lecturer

Kathleen Compton, B.S., Lecturer

Ida Fusillo, M.P.H., Senior Lecturer

Lisa Galich, B.S., Lecturer

Lauren Iagulli, M.P.H., Lecturer

Tracy Laverick-Miller, M.S., Lecturer

Farhana Mueez, M.H.A., Lecturer

Meri Surdoval-Fetkovich, M.S., Lecturer

Associate Programs

- Healthcare Administration (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/aas-healthcare-administration/>)
- Health Information Management (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/aas-health-information-management/>)
- Health Services (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/aas-health-services/>)
- Medical Laboratory Technician (MLT-AAS) (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/medical-laboratory-technician-mlt-aas/>)
- Radiologic Technology (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/radiologic-technology-aas/>)

Baccalaureate Programs

- Allied Health - Completion Program (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/allied-health-baccalaureate-completion-program/>)
- Dental Hygiene (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/dental-hygiene/>)

- Dietetics (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/food-nutrition-didactic-program-dietetics/>)
- Dietetics -MHHS 4+1 Graduate Track (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/dietetics-mhhs-four-plus-one/>)
- Exercise Science (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/bsas-exercise-science/>)
- Exercise Science Graduate Track (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/bsas-exercise-science/pt-track/>)
- Exercise Science MAT Graduate Track (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/bsas-exercise-science/mat-track/>)
- Exercise Science 4+1 MPH Graduate Track (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/bsas-exercise-science/four-plus-one-mp/h/>)
- Food and Nutrition - Graduate Track (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/food-nutrition-graduate-track/>)
- Public Health (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/public-health-health-education-health-protection-track/>)
- Public Health 4+1 MPH Track (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/public-health-environmental-health-track/>)
- Medical Laboratory Science (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/medical-laboratory-science-mls-bsas/>)
- Medical Laboratory Science, Advanced Placement Option (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/medical-laboratory-science-advanced-placement-option/>)
- Respiratory Care (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/bs-respiratory-care/>)
- Respiratory Care Completion Track (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/bs-respiratory-care-completion-track/>)
- Respiratory Care Completion Track Advanced Placement to Grad Track (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/bs-respiratory-care-completion-track-with-advanced-placement-option-master-of-respiratory-care/>)
- Respiratory Care Advanced Placement to Grad Track (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/bs-respiratory-care-advanced-placement-option-to-master-of-respiratory-care/>)

Certificates

- Dental Assisting (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/certificate-in-dental-assisting/>)
- Medical Assistant (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/certificate-in-medical-assistant/>)
- Medical Coding Specialist (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/certificate-in-medical-coding-specialist/>)

- Medical Scribe Specialist (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/certificate-in-medical-scribe-specialist/>)
- Patient Health Navigator (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/certificate-in-patient-health-navigator/>)

Minors

- Minor Nutrition and Health (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/nutrition-and-health-minor/>)
- Minor in Public Health (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/minor-public-health/>)
- Minor in Wellness (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/minor-wellness/>)

Allied Health

AHLT 1501 Medical Terminology 3 s.h.

This course will provide a basic understanding of the origin and components of medical terms needed to reach the goal of learning the language of health care. Included in the content will be definitions, pronunciation, spelling and proper abbreviations. Inherent in comprehending medical terminology would be the review of anatomical structures and systems involved in the functioning of the human body; as well as, diagnoses, surgeries, diagnostic tests and pharmaceutical terms needed to understand patient medical care. This is an online course.

Prereq.: None.

AHLT 1502 Applied Pathophysiology 4 s.h.

Introduction to clinical anatomy, physiology, and pathophysiology with application to acute and chronic illness.

AHLT 2605 Introduction to Pharmacology 3 s.h.

Identification and interactions of drugs used in patient care including the pharmacological action and effects on the patient. Various modes of administration and patient education regarding the effects of common drugs. This is an online course.

Prereq.: Basic knowledge anatomy and physiology.

AHLT 3704 Quantitative Methods in Health Sciences 3 s.h.

This course is designed to provide the Health Care Professional with the ability to read and critically evaluate published research results and reports. Also, to become an educated consumer of medical/dental research and apply evidence based decision making. Critique research results to make judgments regarding the relevance, credibility and usefulness to clinical decision making. Allows for application of research results in the clinical setting.

AHLT 3711 Health Care Information Systems 3 s.h.

The course is comprehensive analysis of the concepts and applications of medical informatics. Relevant technologies and "real world" skills are presented in the field of Medical Informatics using data and medical software.

AHLT 3740 Pathology of Infectious Diseases 3 s.h.

Pathology, prevention, transmission, and treatment of infectious disease; emphasis on nosocomial, opportunistic, and emerging bacterial, fungal, parasitic, and viral organisms.

AHLT 3755 Principles of Occupational Health and Safety 3 s.h.

Contemporary concepts of occupational health and safety as they apply to health-related environments. Includes development of elements needed to implement comprehensive health and safety plans.

AHLT 4801 Special Topics 1-3 s.h.

The directed study and research of a special problem or issue related to the health field. The topic of interest allows the student to participate in the investigation of aspects of administration, education, business, or research as these pertain to the particular health specialty. May be repeated for a total of 6 semester hours.

AHLT 4804 Stress and the Health Care Professional 3 s.h.

Personal reactions of those involved in health education or the delivery of health care to patients, families, and their health environment. Indicators of stress and coping strategies, organizational systems, communication theory, conflict resolution, problem solving, and burnout.

AHLT 4805 Health Education for Allied Health 3 s.h.

University as well as hospital-based programs reviewed in regard to accreditation, clinical vs didactic instruction, use of simulations, and evaluation techniques. Public health education and the role of the Allied Health professional. A major learning unit and/or research project required.

AHLT 4806 Research Methods 3 s.h.

Measurement and interpretation of health data and their application in the research process. Research design considerations, data collection methods, and data analysis of health care research projects.

AHLT 4810 Management Skills for Health Professionals 3 s.h.

A study of the conceptual framework of supervision in Health Care Organizations with emphasis on managerial skills, formulation of policies, principles of budgeting, performance appraisals, and community relations.

AHLT 4820 Directed Research 3 s.h.

Individual study of an issue related to the health care field. Students must present research at a faculty and student forum.

Prereq.: Senior standing and AHLT 4806 or a research methods course approved by the course instructor.

Gen Ed: Capstone.

AHLT 5807 Epidemiology 3 s.h.

A study of the interrelationships of the host, agent, and environment in determining the causation, frequency, and distribution of disease.

Prereq.: AHLT 3708, AHLT 5840, AHLT 4806, or permission of instructor.

AHLT 5816 Environmental Regulations 3 s.h.

Structure and function of federal, state, and local agencies responsible for implementing environmental legislation. Emphasis on the duties and authority of different health and environmental agencies and specific legislation dealing with environmental impacts.

AHLT 5831 Industrial Hygiene 3 s.h.

Basic concepts of industrial hygiene including anticipation, recognition, and evaluation of environmental and safety hazards as they pertain to the workplace.

AHLT 5840 Comparative Health Systems 3 s.h.

Problems and issues facing global health care systems including access to care, financing and rationing of services. A major project is included.

Dental Hygiene

DHYG 1514L Clinical Dental Hygiene Remediation 1 s.h.

This course is designed to improve the dental hygiene student's clinical skills, and to develop the basic competencies essential for performing invasive dental hygiene procedures. The student's individual clinic deficiencies will be addressed, along with patient management and time utilization. This course may be repeated one time. Four hours of clinic per week for twelve weeks.

Prereq.: Unsatisfactory progress in clinical dental hygiene and/or recommendation of the clinic coordinator.

DHYG 2601 Dental Hygiene 1 3 s.h.

An introduction to providing dental hygiene care. Theories and principles of patient assessment, prevention of disease transmission, instrumentation, instrument sharpening, and coronal polishing. Application of risk assessment as it relates to the treatment plan through case studies.

Prereq.: Admission to the Dental Hygiene Program.

DHYG 2601L Clinical Dental Hygiene 1 2 s.h.

Preclinical dental hygiene instruction in a simulation laboratory. Introduction of basic dental hygiene procedures and equipment operation. Six hours of lab per week.

Prereq.: Admission to the Dental Hygiene Program.

DHYG 2602 Dental Hygiene 2 2 s.h.

Discussion of appropriate preventive dental agents and devices to improve various dental conditions and implementation techniques. Development of individualized patient education instruction and a tobacco cessation program as part of the dental hygiene care plan.

Prereq.: DHYG 2601.

DHYG 2602L Clinical Dental Hygiene 2 2 s.h.

Continuation of pre-clinical dental hygiene instruction in the clinical setting. Includes comprehensive patient care planning and implementation techniques. Twelve hours of lab per week.

Prereq.: DHYG 2601L.

DHYG 2620 Head and Neck Anatomy 2 s.h.

A study of the anatomy of the head and neck, oral structures and tooth morphology.

Prereq.: Admission to the Dental Hygiene program.

DHYG 2620L Head and Neck Anatomy Lab 1 s.h.

Applied study of the anatomy of the head and neck, oral structures and tooth morphology. Three hours of lab per week.

Prereq.: Admission to the Dental Hygiene program.

DHYG 2630 Management of Medical/Dental Emergencies 2 s.h.

Instruction in the prevention, recognition, and management of medical emergencies in the dental office. Emphasis on case studies to develop critical thinking and decision-making skills in patient management.

Prereq.: Admission to the Dental Hygiene Program.

DHYG 2640 Oral Histology 2 s.h.

A study of the tissues of the human body and embryological development.

Prereq.: DHYG 2620.

DHYG 3703 Dental Hygiene 3 3 s.h.

Advanced dental hygiene instrumentation and techniques. Patient cases, problem identification, and strategies. Fundamentals of sonic and ultrasonic instrumentation.

Prereq.: DHYG 2602.

DHYG 3703L Clinical Dental Hygiene 3 3 s.h.

Clinic application of dental hygiene techniques on student partners and clinic patients. Emphasis on applied preventive measures and patient education. Nine hours of clinic per week.

Prereq.: DHYG 2602L.

DHYG 3704 Dental Hygiene 4 3 s.h.

Concepts of nutrition science as they relate to the evaluation and education of dental hygiene patients with emphasis on caries risk assessment.

Prereq.: DHYG 3703.

DHYG 3704L Clinical Dental Hygiene 4 3 s.h.

Clinical application of dental hygiene techniques. Emphasis on the interpretation of patient assessment and evidence based research to evaluate patients' oral health and to develop effective treatment plans. Nine hours of clinic per week.

Prereq.: DHYG 3703L.

DHYG 3750 Oral Pathology 2 s.h.

The cause and nature of disease, together with anatomical, histological and functional changes. Observation and evaluation of the patients' systemic and oral health status as it relates to treatment planning. Special emphasis is given to oral pathology and case studies.

Prereq.: DHYG 2640.

DHYG 3760 Dental Radiology 3 s.h.

History and development of radiographs, radiographic theory and techniques, hazardous effects of radiation, and methods of protection. Emphasis on interpretation of normal anatomic structures and pathologic entities; and the use of diagnosis in prevention of dental and related diseases.

Prereq.: DHYG 2602L.

DHYG 3760L Dental Radiology Lab 1 s.h.

The techniques necessary to expose, develop, and mount dental films with emphasis in radiographic interpretation. Three hours of lab per week.

Prereq.: DHYG 2602L.

DHYG 3770 Periodontology 3 s.h.

The study of prevention, diagnosis, and treatment of diseases affecting the gingival and supporting structures of the teeth, as well as implant placement and maintenance. Emphasis is on acquisition of knowledge of the histopathology of disease and the biologic basis for periodontal therapy.

Prereq.: DHYG 2640.

DHYG 3780 Pharmacology 3 s.h.

Importance of pharmacological aspects of those drugs and drug groups with which the dentist and dental hygienist are directly and indirectly concerned. Application of pharmacology in treatment planning.

Prereq.: DHYG 2630.

DHYG 3790 Local Anesthesia and Pain Control for Dental Hygienists 2 s.h.

Instruction in the anatomy, physiology, pharmacology, and administration of local anesthesia and other pain control methods.

Prereq.: DHYG 3703L or permission of the Program Director.

DHYG 3790L Local Anesthesia and Pain Control Clinic 1 s.h.

Application of the techniques of local anesthetic administration and pain control on anatomical models and clinical partners. Three hours of clinic per week.

Prereq.: DHYG 3703L or permission of the Program Director.

DHYG 4805 Dental Hygiene 5 3 s.h.

The role of the dental hygienist in providing care for special needs patients by recognizing the necessary treatment plan modifications due to physical, mental, medical, and social factors.

Prereq.: DHYG 3704.

DHYG 4805L Clinical Dental Hygiene 5 4 s.h.

Advanced clinical application of dental hygiene techniques with emphasis on patient management and radiographic assessment resulting in an individualized and comprehensive treatment plan for periodontal patients. Twelve hours of clinic per week.

Prereq.: DHYG 3704L.

DHYG 4806 Dental Hygiene 6 2 s.h.

A study of dental specialties enhancing students' knowledge, and understanding. Indications for referral, specialized instruments, diagnostic tests, and specific oral hygiene instructions will be discussed.

Prereq.: DHYG 4805.

DHYG 4806L Clinical Dental Hygiene 6 4 s.h.

Continued application of dental hygiene techniques with emphasis on professionalism and competency in private practice. Twelve hours of clinic per week.

Prereq.: DHYG 4805L.

DHYG 4830 Dental Materials 1 s.h.

The sources, physical properties, methods of manufacturing, and uses of various dental materials. Emphasis on the newest products, and interpretation of research supporting product effectiveness.

Prereq.: DHYG 3704L.

DHYG 4830L Dental Materials Lab 1 s.h.

Clinical application of selected dental materials and four-handed dentistry enhancing the students' understanding of dental procedures. Technical procedures and delegated responsibilities will be completed on manikins, and student partners. Three hours of lab per week.

Prereq.: DHYG 3704L.

DHYG 4840 Directed Dental Hygiene Research 3 s.h.

Development of research skills including problem identification, development of a hypothesis, research design, data collection, analysis, and interpretation. Approved dental hygiene topics will be completed as a group under faculty supervision.

Prereq.: AHLT 4806.

Gen Ed: Capstone.

DHYG 4845 Expanded Functions for the Dental Hygienist 3 s.h.

Review of tooth morphology, properties and manipulation of dental restorative material, and techniques and procedures for restoring teeth with amalgam and tooth colored direct restorations. Concepts of four-handed dentistry and knowledge to perform as an Expanded Functions Dental Auxiliary (EFDA).

Prereq.: DHYG 2620, DHYG 2620L and junior standing or consent of instructor.

DHYG 4845L Expanded Functions for the Dental Hygienist Lab 1 s.h.

Laboratory application of restorative techniques utilizing the principles and skills of restorative four-handed dentistry. Preparation of the dental hygiene student to perform the duties of an expanded function dental auxiliary. Three hours of lab per week.

Prereq.: DHYG 2620, DHYG 2620L and junior standing or consent of instructor.

Coreq.: DHYG 4845.

DHYG 4850 Dental Public Health 2 s.h.

An introduction to public health dentistry, a study of the epidemiology of dental disease, writing grant proposals, and implementation of health promotion theories. Preventing and controlling dental disease through organized community efforts is addressed.

Prereq.: DHYG 4805.

DHYG 4850L Community Clinicals 1 s.h.

Oral health care services provided by senior dental hygiene students at community sites. Culturally competent care to underserved populations is the primary course emphasis. Forty-five hours of community clinical experience throughout the semester.

Prereq.: DHYG 4805L.

DHYG 4855L Expanded Functions Clinical 2 s.h.

Clinical implementation of expanded functions dental auxiliary skills gained in DHYG 4845L. Planned, evaluated and supervised clinical experience. Ninety hours of clinical experience throughout the semester.

Prereq.: DHYG 2620, DHYG 2620L, and DHYG 4845L or consent of instructor.

DHYG 4860 Ethics and Practice Concepts 2 s.h.

The historical, professional, legal, and ethical aspects of dental hygiene. Study of practice management topics relevant to the changing roles of hygienists with emphasis on quality care in a patient centered practice.

Prereq.: DHYG 4805.

Emergency Medical Services

EMS 1500 Emergency Medical Technician 4 s.h.

Provides the basic knowledge and skills to be an Emergency Medical Technician. Meets all National Highway and Safety administration National Emergency Medical Services Education Standards and the State of Ohio Approved Emergency Medical Services Curriculum Standards for the Emergency Medical Technician. Must be taken concurrently with EMS 1500L and EMS 1500C.

EMS 1500C Emergency Medical Technician Clinical and Field Internship 1 s.h.

Clinical and Field Internship experience necessary to acquire the skills required to be an Emergency Medical Technician. Meets all national and state curriculum standards for the EMT. Must be taken concurrently with EMS 1500 and EMS 1500L. Ten hours per week after week 12.

EMS 1500L Emergency Medical Technician Laboratory 2 s.h.

Laboratory experience necessary to acquire skills required to be an Emergency Medical Technician. Meets all National and State curriculum standards for the EMT. Six hour lab. Must be taken concurrently with EMS 1500 and EMS 1500C.

EMS 1501 Introduction to Prehospital Medicine 1 s.h.

Introduction to the roles, responsibilities, EMS systems, and medical and legal considerations of the EMS profession.

Prereq.: Admission to the EMS program.

EMS 1502 General Pathophysiology for the Paramedic 3 s.h.

Study of general lifespan development of the body, how pathophysiologic changes affect it. Provides a foundational basis for viewing the body as a system, understanding its functions, anticipated reaction to injury, illness and intervention.

Prereq.: Admission to EMS program or permission of instructor.

EMS 1503 Patient Assessment and Airway Management 3 s.h.

Intensive course designed to prepare the student in the methodology of advanced patient assessment, and the relevance of clinical signs and symptoms identified. Airway anatomy, equipment, procedures as they pertain to advanced airway management.

Prereq.: Admission to EMS program or permission of instructor.

EMS 1504 Principles of Trauma 3 s.h.

Study of traumatic emergencies normally encountered prehospitally with emphasis on pathophysiology, etiology, symptomatology, and management.

Prereq.: Admission to EMS program or permission of Program Director.

EMS 1505 Emergency Medical Techniques 1 Lab 1 s.h.

Includes simulated emergency traumatic situations and actual patient contact emphasizing physical assessment, patient interviewing, and management techniques. Meets 3 hours per week. Must be taken concurrently with EMS 1501, EMS 1502, EMS 1503, and EMS 1504.

Prereq.: Admission to the EMS program or special permission of program director.

EMS 1506 Emergency Medical Services Clinical 1 1 s.h.

Clinical experiences in the emergency department and in the operating room allowing the student to work on various skills necessary for the paramedic. Total of 90 clinical hours. Must be taken concurrently with EMS 1503 and EMS 1505.

Prereq.: Admission to EMS program or permission of instructor.

EMS 1507 Cardiovascular Emergencies 3 s.h.

Intense study of the etiology, pathophysiology, symptomatology, and management principles for cardiovascular emergencies. Includes electrophysiological principles of EKG interpretation. Must be taken concurrently with EMS 1508.

Prereq.: Admission to EMS program or permission of instructor.

EMS 1508 Cardiovascular Techniques Lab 1 s.h.

Performance of fundamental techniques employed in the management of cardiovascular emergencies. Three hours lab per week. Must be taken concurrently with EMS 1507.

Prereq.: EMS 1502, EMS 1503, and EMS 1504.

EMS 1512 Medical Conditions and Management Techniques 3 s.h.

Study of pathophysiology, symptomatology, etiology, and management techniques of commonly encountered medical emergencies. Must be taken concurrently with EMS 1513.

Prereq.: EMS 1502, EMS 1503, EMS 1504.

EMS 1513 Emergency Medical Techniques 2 Lab 1 s.h.

Simulated situations and actual patient contact emphasizing performance of emergency medical techniques utilized to manage common medical emergencies. Must be taken concurrently with EMS 1512.

Prereq.: EMS 1505.

EMS 1514 Emergency Medical Services Operations 1 s.h.

Introduction to common rescue tools and techniques utilized in basic victim disentanglement and extrication.

Prereq.: Admission to EMS program or permission of instructor.

EMS 1515 Clinical Experience 2 1 s.h.

Hospital clinical experience to include rotations through the following: Adult emergency department, critical and intensive care units. Total of 95 hours. Must be taken concurrently with EMS 1508 and EMS 1513.

Prereq.: EMS 1506.

EMS 1516 Prehospital Field Experience 1 1 s.h.

Field experience with an approved advanced life support unit under the direct supervision of a selected paramedic field preceptor. Total of 200 hours. To be taken concurrently with EMS 1507 and EMS 1512.

Prereq.: EMS 1504.

EMS 2600 Emergency Medical Services Special Populations 3 s.h.

Study of etiology, pathophysiology, symptomatology and management of special needs patients. Includes gynecology, obstetrics, neonatology, pediatrics, geriatrics, behavioral, abuse/assault, infectious and communicable diseases, and chronic care. Must be taken concurrently with EMS 2601.

Prereq.: EMS 1507 and EMS 1512 or permission of instructor.

EMS 2601 Emergency Medical Techniques 3 Lab 1 s.h.

Techniques necessary to effectively manage conditions in EMS 2600. Three hour lab. Must be taken concurrently with EMS 2600 and EMS 2605.

Prereq.: Admission to the EMS program or permission by program director.

EMS 2603 Clinical Experience 3 2 s.h.

Precepted hospital clinical in the adult and pediatric emergency department; obstetrics, labor and delivery; and, psychiatric department. Total of 120 hours of clinical experience. Must be taken concurrently with EMS 2600.

Prereq.: EMS 1515.

EMS 2604 Prehospital Field Experience 2 1 s.h.

Performance of advanced life support procedures under the direct supervision of a selected paramedic field preceptor. Total of 150 hours.

Prereq.: EMS 1516.

EMS 2605 Pulmonary Emergencies 3 s.h.

Intense study of the etiology, pathophysiology, symptomatology, and management principles of pulmonary emergencies. Must be taken concurrently with EMS 2601.

Prereq.: EMS 1507 and EMS 1512.

EMS 2606 EMS Special Certifications 1 s.h.

Provides the Paramedic with certifications beneficial to prehospital care. These certifications are nationally recognized and commonly sought after by paramedics, and desired by employers. Include PALS, PHTLS, NRP, and EMPACT. To be taken concurrently with EMS 2607.

Prereq.: Admission to EMS program or special permission of instructor.

EMS 2607 EMS Special Certifications Lab 1 s.h.

Focus on skills and competencies required for PALS, PHTLS, NRP. To be taken concurrently with EMS 2606.

Prereq.: Admission to the EMS program or special permission by the program director.

EMS 2609 EMS Prehospital Field Internship 3 s.h.

Capstone Field Internship experience requiring the paramedic student to perform successfully as a team leader on an advanced life support unit in the prehospital setting. A minimum of 30 team leads is required with an assigned field preceptor. Approximately 22 hours of field internship per week.

Prereq.: EMS 2604.

Gerontology

GERO 1501 Introduction to Gerontology 3 s.h.

Basic introduction to the interdisciplinary study of aging. Includes social, psychological, economic, cultural, health, and policy issues. Discussion of normal vs. abnormal (disease-related) aspects of aging.

Gen Ed: Social Science.

GERO 3703 Aging and Society 3 s.h.

An interdisciplinary introduction to studies in aging. Examines the impact of population aging and its effect on society at large. Also examines individual aging processes and social significance of aging. Listed also as SOC 3703.

Prereq.: SOC 1500 or GERO 1501.

Gen Ed: Social Science, Well Being, Social and Personal Awareness.

GERO 3703H Honors Aging and Society 3 s.h.

An interdisciplinary introduction to studies in aging. Examines the impact of population aging and its effect on society at large. Also examines individual aging processes and social significance of aging. Listed also as SOC 3703.

Prereq.: SOC 1500 or GERO 1501.

Gen Ed: Social Science, Well Being, Social and Personal Awareness.

GERO 3745 Sociology of Health, Illness, and Healthcare 3 s.h.

Social attitudes toward illness. Cultural and social factors in disease definition of illness, and organization of the health professions and health facilities.

Listed also as SOC 3745.

Prereq.: SOC 1500, GERO 1501, or admission to NEOMED-YSU program.

Gen Ed: Well Being, Social and Personal Awareness.

GERO 4850 Research Methods 3 s.h.

An introduction to methods employed in social research. Attention is given to (1) the logic of scientific inquiry and the relationship between theory and methods; (2) the various qualitative and quantitative methods; (3) research design, data collection, organization, analysis, interpretation and application; (4) the social, cultural, political, and ethical context of social research; and (5) computer skills employed in data analysis. Listed also as ANTH 4850 or SOC 4850.

Prereq.: SOC 3701, ANTH 3701.

GERO 4851 Capstone in Gerontology 3 s.h.

A capstone experience for the interdisciplinary study of aging. Students will complete a major research project.

Prereq.: Senior status in Gerontology and SOC 4850.

Gen Ed: Capstone.

GERO 7090 Field Practicum 1-9 s.h.

Students will complete a 200-hour placement in an aging-related workplace. Variable credit 1-6 s.h. May be repeated for up to 9 s.h.

GERO 7094 Selected Topics 3 s.h.

An examination of contemporary topics in the field of gerontology. Examples of subject areas that may be covered: Nutrition, Pharmacology, Legal, etc. variable credit 1-3 hours may be repeated for up to 6 credit hours.

Kinesiology and Sport Science

KSS 1500 Physical Activity Core Concepts 1 s.h.

Essential concepts that document the relationship between physical activity and maintaining optimal health. Personal and social implications of physical inactivity are also explored. Two KSS activity courses must be taken in addition to this course to satisfy the requirements for GER credit.

Gen Ed: Well Being, Social and Personal Awareness.

KSS 1502 Volleyball 1 s.h.

Basic rules and fundamental skills of volleyball including serves, bump, overhead pass, and block.

KSS 1503 Flight: 1st Year Student-Athlete Experience 2 s.h.

An introduction to the student-athlete development model through development research, NCAA programming, and practical application to prepare student-athletes for life after athletics as they develop the necessary skills to be engaged citizens and prepared professionals.

KSS 1504 Life After Sports 2 s.h.

Life After Sports is a continuation of the student-athlete development model through development research, NCAA programming, and practical application to prepare student-athletes for life after athletics as they develop the necessary skills to be engaged citizens and prepared professionals.

KSS 1508 Group Cycling 1 s.h.

Introduction to improving fitness levels through group cycling. The emphasis in this class will be on improving cardiovascular fitness through indoor stationary cycling bicycles. All fitness levels are welcomed and will acquire fitness benefits.

KSS 1509 Meditation 1 s.h.

Overview of practical meditation theory, with diverse practices culled from the world's wisdom inheritance presented as guided meditation experiences. Historical perspective, along with relevant findings of current neuroscience research which support the efficacy of meditation are considered. The practices develop heightened awareness skills, whether practiced sitting, standing, walking, or supine.

KSS 1512 Bowling 1 s.h.

Fundamentals of bowling the straight ball. Equipment selection, correction of errors, and scoring. For beginning bowlers. The bowling lanes are located off campus. Transportation to the lanes is not provided.

KSS 1514 Fencing 1 1 s.h.

Fundamentals of foil fencing. Methods of attack and parry, and elementary bouting and judging.

KSS 1516 Boxing for Beginners 2 s.h.

This course consists of learning how to properly workout like a boxer. Students will be trained to use the proper equipment, and how to stand, move, punch, and train like a boxer preparing to competitively box. Students will NOT be actually boxing another competitor.

KSS 1517L Horseback Riding 1 Lab 1 s.h.

This course provides students with a fun way to enjoy recreational horseback riding while learning important riding skills. This course is off campus.

Coreq.: KSS 1517.

KSS 1519 Racquetball 1 s.h.

Racquetball rules and techniques for singles and doubles play. Basic strategy and skill development.

KSS 1520 Golf 1 1 s.h.

Fundamental skills of golf. Includes grip, stance, swing patterns, and putting as well as rules of course play.

KSS 1522 Tennis 1 1 s.h.

Fundamental skills of tennis including forehand and backhand drives and service. Basic rules, strategy, and method.

KSS 1524 Physical Fitness and Exercise Program 1 s.h.

Discussion and participation in activities designed to develop and improve the health-related aspects of physical fitness including weight and stress control.

KSS 1526 Marksmanship 1 s.h.

The safety and practice of handling firearms. Target shooting in prone, kneeling and standing positions.

KSS 1530 Learn to Swim 1 s.h.

Introduction to swimming and survival skills, floating, drown-proofing, basic swim strokes (side, elementary back, and front crawl), beginning diving, and simple aquatic games. This course is designed for the student who cannot swim; it is not open to swimmers.

KSS 1534 Fitness Swimming 1 s.h.

Utilization of freestyle swimming stroke to improve/maintain fitness across the lifespan. Content includes stroke mechanics, turning technique, and swim training program design to meet individual fitness and health goals.

Prereq.: Ability to swim for 250 yards.

KSS 1547 Flexibility and Core Training 1 s.h.

When performed properly, flexibility can reduce injuries, help recover from injuries, correct muscle imbalances, and recover from exercise. Stretching has also been shown to promote relaxation and stress reduction. This course will cover flexibility utilizing flexbands. In addition, core work and light resistance training will be explored.

KSS 1549 Varsity Competition 1 s.h.

Credit may be obtained through competition in varsity athletic programs.

Prereq.: Consent of coach.

KSS 1550 Pilates 1 s.h.

Instruction in principles of body alignment and posture and participation as it pertains to fundamental Pilates techniques.

KSS 1552 Yoga 1 s.h.

Instruction in principles of meditation, body alignment and posture, and participation as it pertains to fundamental yoga techniques.

KSS 1553 Yoga 2 1 s.h.

Builds on the groundwork of fundamental postures, breathing, present moment awareness practices, and various methods for removal of mental and physical tensions introduced in KSS 1552. Practices are drawn from the inheritance of Yoga (Hatha and Raja), for further skill development for managing health and vitality of mind and body.

Prereq.: KSS 1552 or consent of instructor.

KSS 1554 Fitness Walking 1 s.h.

Information on the benefits of walking for fitness. Health advantages, appropriate conditioning, pace, warm-up and cool-down. Practical experience in the skills needed to achieve success in developing and adhering to a walking program.

KSS 1555 Jogging 1 s.h.

Holistic approach to the theory and practice of jogging with emphasis on the physiological benefits.

KSS 1557 Weight Training 1 s.h.

Introduction to progressive resistive exercise for men and women. Topics include strength training, types of equipment, exercise techniques, circuit training, competitive weightlifting, body building, and injury prevention.

KSS 1559 Aerobic Conditioning Activities 1 s.h.

Practical experience in activities that improve cardiovascular endurance. Such activities include, but are not limited to, aquatics, fitness walking and jogging.

Prereq.: Exercise science major.

KSS 1560 Resistance Training 2 s.h.

Concepts and applications of progressive resistance exercise. Emphasis on advanced principles and techniques for developing muscular strength and endurance for fitness and athletic performance. Two hours lab.

Prereq.: major in exercise science or permission of instructor.

KSS 1563 Rock Climbing 1 s.h.

Instruction and participation in fundamental rock climbing techniques that include safely constructing anchor systems, employing belay methods, equipment selection, and beginning climbing skills.

KSS 1565 Self Defense 1 s.h.

The defensive techniques of Judo and Aikido designed to counter attacks with a knife, club, gun or bare fist. Balance, control, safety, falling.

KSS 1568 Taekwondo/Karate 1 s.h.

An introduction to the history, philosophy and techniques of taekwondo/karate. Fundamental techniques include: stances, kicks, punches, and forms.

KSS 1588 Selected Activities in Kinesiology and Sport Science 1 s.h.

Knowledge of and practice in a particular area of dance, fitness, or sport. Activity is announced each time the course is offered. May be repeated up to 4 s.h. with change in topic.

KSS 1590 Foundations of Fitness 3 s.h.

Students will learn the fundamentals of fitness as it relates to lifestyle choices and health. Discussion and participation in activities designed to develop and improve the health-related aspects of physical fitness including weight and stress control will be used to develop a personal fitness program through personal goals.

KSS 1595 Introduction to Kinesiology and Sport Science 2 s.h.

Introduction to physical education, exercise science and related professions. Includes exploration of the general concepts, goals, aims, objectives, professional organizations, scholarly literature, sub-disciplines within the field, and career employment opportunities.

KSS 2605 Sports First Aid and Injury Prevention 3 s.h.

Basic injury prevention, evaluation, and emergency care. Certification in ARC Standard First Aid and Adult CPR. Basic wrapping and strapping techniques used with common sports injuries. Two hours lecture, two hours lab.

Prereq.: Exercise science major, Wellness minor, or consent of instructor.

KSS 2625 Pedagogical Aspects of Exercise Science 3 s.h.

Effective instructional practices and development of organizational skills and characteristics required for teaching in exercise programs. Two hours lecture, two hours lab.

KSS 2699 Sport in American Culture 3 s.h.

Sport in American culture from the colonial period to the present as it relates to such areas as education, literature, film and drama, minorities, politics, professional sport, religion and urbanization.

KSS 3700 Exercise Evaluation and Testing 4 s.h.

Theory and practice of pre-exercise evaluation, exercise testing, and results interpretation for generally healthy populations, according to American College of Sports Medicine (ACSM) guidelines. Includes a minimum of 30 hours of field experience.

Prereq.: Major, KSS 3710 and KSS 3710L.

KSS 3710 Physiology of Exercise 4 s.h.

Acute responses and chronic adaptations of the body to physiological demands of physical activity. Topics related to the optimization of performance in sport and exercise include neuromuscular and cardiorespiratory function, energy production and utilization, and environmental influences.

Prereq.: Exercise Science major.

KSS 3710L Physiology of Exercise Laboratory 1 s.h.

Experiments and basic laboratory procedures in the field of exercise physiology. Concurrent with: KSS 3710.

KSS 3720 Kinesiology and Applied Anatomy 4 s.h.

Muscular structure and function in relation to physical movement; analysis of fundamental movements.

Prereq.: KSS 1595.

KSS 3725 Mindfulness 2 s.h.

Mindfulness is a state of active, open attention on the present and the practice of being aware moment-to-moment. Students will learn techniques of mindfulness. Topics include breath awareness, sitting meditation, body scanning, walking meditation, eating meditation, yoga, loving kindness and yoga nidra.

Prereq.: PSYC 1560 or KSS 1590.

KSS 3730 Exercise Prescription 4 s.h.

Theory and practice of exercise prescription based on metabolic calculations for apparently healthy populations, older adults, children/adolescents, pregnant women, and those with obesity, dyslipidemia, and hypertension. Includes approximately 18 hours of field experience. Content based on American College of Sports Medicine objectives.

Prereq.: KSS 3700.

KSS 3750 Principles of Coaching 2 s.h.

The scientific, psychological, and management aspects of coaching. Includes ethics and management responsibilities, personnel management, community relations, conditioning, and other related topics.

Prereq.: Junior standing.

KSS 3760 Strength Training and Conditioning 3 s.h.

Scientific principles, concepts, and adaptations to resistance exercise. Practical application of lifting and spotting technique, testing procedures, program design, and organization and administration of the strength and conditioning facility. Two hours lecture, two hours lab.

Prereq.: KSS 1560 and KSS 3710.

KSS 3765 Athletic Training 1 2 s.h.

Practical and theoretical aspects of the prevention of athletic injuries. Includes supplies, wrapping and strapping, protective equipment. Emphasizes prevention, evaluation, and emergency care. One hour lecture, two hours lab.

Prereq.: KSS 1595 and KSS 2605.

KSS 4805 Administration of Exercise Programs 3 s.h.

Provides an overview of legal, management, and marketing skills necessary to implement exercise related wellness programs. Requires development of business plan including facility design and equipment selection.

Prereq.: KSS 3700.

KSS 4810 Clinical Exercise Testing and Prescription 4 s.h.

Theory and practice of clinical exercise testing, including electrocardiography, and prescription, for those with cardiovascular disease, pulmonary disease, diabetes, kidney disease, diabetes, and cancer. Includes approximately 36 hours of field experience. Content based on American College of Sports Medicine objectives.

Prereq.: KSS 3730.

KSS 4865 Athletic Training 2 2 s.h.

Advanced techniques of athletic training with emphasis on evaluation, treatment and rehabilitation of athletic injuries. Topics include application of therapeutic modalities, reconditioning programs, and the role of the athletic trainer in sports medicine. One hour lecture, two hours lab.

Prereq.: KSS 3765.

KSS 4870 Exercise and Aging for Health Professions 3 s.h.

For majors in Gerontology/Health Professions who work with older adults in exercise/physical activity programs. Emphasis on physical aspects/limitations of aging, exercise testing, prescription, and programs for the elderly. Not applicable to the major in Exercise Science.

Prereq.: Senior standing or permission of instructor.

KSS 4875 Exercise Counseling and Behavioral Strategies 4 s.h.

Exercise Counseling and Behavioral Strategies Evidence-based theories and domains geared toward fostering change, growth, and self-actualization in exercise. The scientific foundations of basic exercise counseling and behavioral strategies that enable effective wellness coaching are explored.

Prereq.: Junior standing.

KSS 4880 Internship 8 s.h.

A culminating experience in an approved fitness or sports-related setting under the direct supervision of a qualified individual and coordinated by a supervising faculty member. Requires 400 hours to obtain 8 s.h. May be taken concurrently with KSS 4875.

Prereq.: Completion of Exercise Science core requirements through KSS 4810.

KSS 4888 Selected Topics in Kinesiology and Sport Science 1-3 s.h.

In-depth study of special subject matter within the field of physical education. Topic announced each time course is offered. May be repeated for a maximum of 6 s.h. with change in topic.

Prereq.: 72 s.h. or consent of instructor.

KSS 4890 Undergraduate Research 1-3 s.h.

Research participation under the direction and guidance of a full-time faculty member. Provides the advanced student with research experience in HPES. May be repeated to a maximum of six s.h. Junior standing or permission of instructor.

Medical Laboratory Science

MLS 1501 Introduction to the Medical Laboratory Profession 2 s.h.

Overview of the medical laboratory profession, ethics, responsibilities and clinical relevance of laboratory procedures. Concurrent with: MLS 1501L.

Prereq.: MATH 1504 or level 20 on Math Placement Test, high school chemistry or CHEM 1501, high school biology or BIOL 1505.

MLS 1501L Introduction to the Medical Laboratory Profession Laboratory 1 s.h.

Phlebotomy, specimen collection and processing; basic medical laboratory exercises. Three hours lab per week. Concurrent with: MLS 1501.

Prereq.: MATH 1504 or level 20 on Math Placement Test, high school chemistry or CHEM 1501, high school biology or BIOL 1505.

MLS 1502 Urinalysis and Body Fluids 2 s.h.

Theory, clinical correlation and techniques in the analysis of urine and body fluids. Coreq: MLS 1502L.

Prereq.: MLS 1501 and MLS 1501L.

Cross-Listed: MLT 1502.

MLS 1502L Urinalysis and Body Fluid Laboratory 1 s.h.

Chemical and microscopic analysis of urine and body fluids.

Prereq.: MLS 1501/L.

Cross-Listed: MLT 1502L.

MLS 1503 Immunohematology 3 s.h.

Fundamental theories and techniques in immunohematology and blood banking.

Prereq.: MLS 1501/L; BIO 2601/L.

Coreq.: MLS 1503L.

Cross-Listed: MLT 1503.

MLS 1503L Immunohematology Laboratory 1 s.h.

ABO and RH typing, direct and indirect antiglobulin testing, compatibility testing. Three hours lab per week.

Prereq.: MLS 1501/L; BIO 2601/L.

Coreq.: MLS 1503.

Cross-Listed: MLT 1503L.

MLS 2601 Clinical Chemistry 1 2 s.h.

This course provides an introduction to the principles, procedures, and significance of tests performed in the clinical chemistry laboratory. Theory and principles of test methodologies are discussed and data are correlated to physiological processes.

Prereq.: MLS 1501/L; CHEM 1510/L.

Cross-Listed: MLT 2601.

MLS 2601L Clinical Chemistry 1 Laboratory 1 s.h.

This course will apply principles of semi-automated and automated analysis including Spectrophotometry and various techniques for analysis of glucose, electrolytes, enzymes, and other chemical constituents of serum and body fluid.

Prereq.: MLS 1501/L, CHEM 1510/L.

Coreq.: MLS 2601.

Cross-Listed: MLT 2601L.

MLS 2603L Advanced Immunohematology Laboratory 1 s.h.

Clinical application of advanced Immunohematology procedures. Three hours of laboratory per week. 1 s.h.

Prereq.: MLS 1503/L (Minimum grade "C").

Cross-Listed: MLT 2603L.

MLS 2605 Molecular Diagnostics 2 s.h.

This course focuses on the newest medical laboratory discipline known as molecular diagnostics. The content will include principles of molecular biology (nucleic acid) tools and their application to aid in identification, diagnosis, and prognosis of conditions and disease states.

Prereq. or Coreq.: BIO 2601/2601L, MLS or MLT 1501/L.

Cross-Listed: MLT 2605.

MLS 3700 Clinical Chemistry 2 4 s.h.

This course will explore the principles and procedures of routine clinical chemistry analysis, including correlation of test results with pathophysiology, testing criteria and variables that impact accuracy.

Prereq.: MLS 2601/L.

MLS 3701 Clinical Hematology 1 2 s.h.

Hematopoiesis; theory and laboratory application of manual procedures in hematology including cell counts, hemoglobin, hematocrit, and differentials; introductory hemostasis and laboratory applications. Two hours of lecture per week.

Prereq.: MLS 1501, MLS 1501L, BIOL 2601 with a minimal grade of "C".

MLS 3701L Clinical Hematology 1 Laboratory 1 s.h.

Laboratory application of manual procedures in hematology including cell counts, hemoglobin, hematocrit, and differentials; introductory hemostasis and laboratory applications. Three hours of laboratory per week.

Prereq.: MLS 1501, MLS 1501L, BIOL 2601 with a minimal grade of "C".

Coreq.: MLS 3701.

MLS 3702 Clinical Hematology 2 2 s.h.

Advanced theory and laboratory procedures in hematology and hemostasis, including leukemia, anemia, hematopathology and coagulation disorders; abnormal differentials and automated methods. Two hours of lecture week.

Prereq.: MLS 3701, MLS 3701L with a minimal grade of "C".

MLS 3702L Clinical Hematology 2 Laboratory 1 s.h.

Laboratory procedures in hematology and hemostasis, including leukemia, anemia, hematopathology and coagulation disorders; abnormal differentials and automated methods. Three hours of laboratory per week.

Prereq.: MLS 3701, MLS 3701L with a minimal grade of "C".

Coreq.: MLS 3702.

MLS 3704 Clinical Immunology and Serology 3 s.h.

A study of the diagnostic applications of immunology and methods of serological testing. The immunology and diagnosis of infectious disease, autoimmunity, immunodeficiency, and immunoproliferative disease will be discussed.

Coreq.: MLS 3704L.

Cross-Listed: MLT 3704.

MLS 3704L Clinical Immunology and Serology 1 s.h.

A study of the diagnostic applications of immunology and methods of serological testing. The immunology and diagnosis of infectious disease, autoimmunity, immunodeficiency, and immunoproliferative disease will be discussed.

Coreq.: MLS 3704.

Cross-Listed: MLT 3704L.

MLS 3787 Diagnostic Microbiology 3 s.h.

Clinical applications of human pathogenic microorganisms; infections, frequency, isolation, identification, and treatment of bacteria, fungi, viruses, and parasites. Case studies, problem solving, and quality assurance in clinical microbiology. Three hours lecture per week.

Prereq.: MLS 1501/L.

Coreq.: MLS 3787L.

MLS 3787L Diagnostic Microbiology Laboratory 2 s.h.

A clinical approach to the study of bacteria, fungi, viruses, and parasites. Methods to isolate and identify clinically significant pathogens from clinical specimens; case studies in clinical microbiology. Six hours lab per week. Identical with MLT 3787L.

Prereq.: MLS 1501/L.

Coreq.: MLS 3787.

MLS 4800 MLS Chemistry Clinical Experience 7 s.h.

Didactics and critical analysis of clinical chemistry provided at the clinical site. 7 semester hours. Grading is Traditional or PR.

Prereq.: Acceptance into an MLS 3+1 clinical internship.

MLS 4801 MLS Hematology Clinical Experience 7 s.h.

Diagrams and clinical analysis of clinical hematology. 7 semester hours. Grading is Traditional or PR.

Prereq.: Acceptance into the 3+1 clinical internship year.

MLS 4802 MLS Immunohematology Clinical Experience 7 s.h.

Didactics and critical analysis of blood banking, Immunohematology, and Transfusion Medicine. Seven semester hours. Grading is Traditional or PR.

Prereq.: Acceptance into a 3+1 clinical internship.

MLS 4803 MLS Microbiology Clinical Experience 7 s.h.

Didactics and critical analysis of bacteriology, mycology, virology and Parasitology. Seven semester hours. Grading is Traditional or PR.

Prereq.: Acceptance into an MLS 3+1 clinical internship year.

MLS 4804 Miscellaneous Clinical Experience 7 s.h.

Didactic and clinical analysis of specimen collection and processing. Management, education, molecular diagnostics, hemostasis, clinical immunology, and urinalysis and body fluids. Seven semester hours. Grading is Traditional or PR.

Prereq.: Acceptance into an MLS 3+1 clinical internship year.

MLS 4807 Advanced Clinical Chemistry 4 s.h.

The study of fundamental principles of chemical analysis in the laboratory and correlation to pathological disease states. Web based lecture.

Prereq.: Acceptance into the MLS Advanced placement online completion program.

MLS 4807L Advanced Clinical Chemistry Lab Competency 2 s.h.

Laboratory procedures in clinical chemistry. Students may submit verified competency and receive experiential credit. Students who do not meet required competency must register for and engage in clinical training at an affiliated clinical site.

Prereq.: Acceptance into the MLS Advanced Placement online completion program.

MLS 4808 Advanced Hematology 4 s.h.

Advanced study of human blood and laboratory analysis and correlation to hematological and hematopoietic disorders. Web based lecture.

Prereq.: Acceptance into the MLS Advanced Placement Online Completion Program.

MLS 4808L Advanced Hematology Clinical Competency 2 s.h.

Laboratory application of hematological and hematopoietic analysis.

Prereq.: Admission to the MLS Advanced Placement Online Completion Program.

MLS 4809 Advanced Immunohematology 4 s.h.

Didactic and critical analysis of bloodbanking, immunohematology, and transfusion medicine. Web based lecture.

Prereq.: Admission to the MLS Advanced Placement Online Completion Program.

MLS 4809L Advanced Immunohematology Clinical Competency 2 s.h.

Clinical application of IH procedures in the laboratory.

Prereq.: Admission to the MLS Advanced Placement Online Completion Program.

MLS 4810 Advanced Diagnostic Microbiology 5 s.h.

Didactics and critical analysis of host/Microbial interaction and laboratory identification of medically significant bacteria, fungi, parasites, and viruses. Correlation to disease states and analysis of laboratory techniques utilized in the diagnosis of infections and disease. Web based lecture.

Prereq.: Admission to the MLS Advanced Placement Online Completion Program.

MLS 4810L Advanced Microbiology Competency 3 s.h.

Clinical competency in Microbiological procedures utilized in the Medical Laboratory.

Prereq.: Admission to the MLS Advanced Placement Online Completion Program.

MLS 4811 Advanced Immunology and Urinalysis 4 s.h.

Didactics and Critical analysis of Immunological and Serological principles and analysis in the clinical laboratory and correlation to disease states. Web based lecture.

Prereq.: Admission to the MLS Advanced Placement Online Completion Program.

MLS 4811L Adv Immuno/Sero, Urinalysis, and Molecular Competency 2 s.h.

Competent application of Immunological and Serological techniques utilized in the medical laboratory. Competent application of techniques in Urinalysis and Molecular Diagnostics.

Prereq.: Admission to the MLS Advanced Placement Online Completion Program.

MLS 4812 Advanced Laboratory Operations 2 s.h.

Didactics and critical analysis of laboratory management, regulations, safety, quality control and quality assurance in the clinical laboratory. Web based lecture.

Prereq.: Acceptance in MLS Advanced Placement Online Completion Program.

MLS 4813 Advanced Placement Seminar 1 s.h.

Certification preparation.

Prereq.: Admission to MLS advanced placement program and instructor approval.

Medical Laboratory Technology

MLT 1501 Introduction to the Medical Laboratory Profession 2 s.h.

Overview of the medical laboratory profession, ethics, responsibilities and clinical relevance of laboratory procedures.

Prereq.: Level 20 on Math Placement Test, high school chemistry or CHEM 1501, high school biology or BIOL 1505. h.

Coreq.: h.

MLT 1501L Introduction to the Medical Laboratory Profession Laboratory 1 s.h.

Phlebotomy, specimen collection and processing; basic medical laboratory exercises. Three hours lab per week. Concurrent with: MLT 1501.

Prereq.: MATH 1504 or level 20 on Math Placement Test, high school chemistry or CHEM 1501, high school biology or BIOL 1505.

MLT 1502 Urinalysis and Body Fluids 2 s.h.

Theory and techniques in the analysis of urine and body fluids. Concurrent with: MLT 1502L.

Prereq.: MLT 1501, MLT 1501L, BIOL 2601.

MLT 1502L Urinalysis and Body Fluids Laboratory 1 s.h.

Chemical and microscopic analysis of urine. Concurrent with: MLT 1502. Three hours lab per week.

Prereq.: MLT 1501, MLT 1501L, BIOL 2601.

MLT 1503 Immunohematology 3 s.h.

Fundamental theories and techniques of immunohematology and blood banking; genetic theories, problem solving, and case studies. Three hours of lecture per week.

Prereq.: MLT 1501.

Prereq. or Coreq.: BIOL 2601.

Coreq.: MLT 1503L.

Cross-Listed: MLS 1503.

MLT 1503L Immunohematology Laboratory 1 s.h.

ABO and RH typing, direct and indirect antiglobulin testing, compatibility testing. Three hours lab per week. **Coreq.:** MLT 1503.1 s.h.

Prereq.: MLT 1501, MLT 1501L, BIOL 2601.

Cross-Listed: MLS 1503L.

MLT 2601 Clinical Chemistry 1 2 s.h.

This course provides an introduction to the principles, procedures, and significance of tests performed in the clinical chemistry laboratory. Theory and principles of test methodologies are discussed and data are correlated to physiological processes.

Prereq.: MLT 1501, MLT 1501L, CHEM 1510/L.

Coreq.: MLT 2601L.

Cross-Listed: MLS 2601.

MLT 2601L Clinical Chemistry 1 Laboratory 1 s.h.

Application of the procedures and techniques utilized in the clinical chemistry laboratory. 3 hours of lab per week.

Prereq.: MLT 1501, MLT 1501L, CHEM 1510/L.

Coreq.: MLT 2601.

MLT 2603 Immunohematology Laboratory 2 1 s.h.

Clinical Laboratory theory and application of Immunohematology procedures. Three hours laboratory per week.

Prereq.: MLT 1502/L and MLT 1503/L with a minimal grade of "C".

MLT 2603L Advanced Immunohematology Laboratory 1 s.h.

Application of advanced theories in Immunohematology. Three hours of laboratory per week.

Prereq.: MLT 1502 and 1502L with a "C" or better.

Cross-Listed: MLS 2603L.

MLT 2605 Molecular Diagnostics 2 s.h.

This course focuses on the newest medical laboratory discipline known as molecular diagnostics. The content will include principles of molecular biology (nucleic acid) tools and their application to aid in identification, diagnosis, and prognosis of conditions and disease states.

Prereq.: BIOL 2601/L.

Cross-Listed: MLS 2605.

MLT 3700 Clinical Chemistry 2 4 s.h.

This course will explore the principles and procedures of routine clinical chemistry analysis, including correlation of test results with pathophysiology, testing criteria and variables that impact accuracy. Cross-Listed: MLS 3700.

MLT 3701 Clinical Hematology 1 2 s.h.

Hematopoiesis; theory and laboratory application of manual procedures in hematology including cell counts, hemoglobin, hematocrit, and differentials; introductory hemostasis and laboratory applications. Two hours of lecture per week.

Prereq.: MLT 1501, MLT 1501L, BIOL 2601 with a minimal grade of "C".

MLT 3701L Clinical Hematology 1 Laboratory 1 s.h.

Laboratory application of manual procedures in hematology including cell counts, hemoglobin, hematocrit, and differentials; introductory hemostasis and laboratory applications. Three hours of laboratory per week.

Prereq.: MLT 1501, MLT 1501L, BIOL 2601 with a minimal grade of "C".

Coreq.: MLT 3701.

MLT 3702 Clinical Hematology 2 2 s.h.

Advanced theory and laboratory procedures in hematology and hemostasis, including leukemia, anemia, hematopathology and coagulation disorders; abnormal differentials and automated methods. Two hours of lecture week.

Prereq.: MLT 3701, MLT 3701L with a minimal grade of "C".

MLT 3702L Clinical Hematology 2 Laboratory 1 s.h.

Laboratory procedures in hematology and hemostasis, including leukemia, anemia, hematopathology and coagulation disorders; abnormal differentials and automated methods. Three hours of laboratory per week.

Prereq.: MLT 3701, MLT 3701L with a minimal grade of "C".

Coreq.: MLT 3702.

MLT 3704 Clinical Immunology and Serology 3 s.h.

A study of the diagnostic applications of immunology and methods of serological testing. The immunology and diagnosis of infectious disease, autoimmunity, immunodeficiency, and immunoproliferative disease will be discussed.

Coreq.: MLT 3704L.

Cross-Listed: MLS 3704.

MLT 3704L Clinical Immunology/Serology Laboratory 1 s.h.

The immunology and diagnosis of infectious disease, autoimmunity, immunodeficiency, and immunoproliferative disease will be discussed. 2 hours of lab per week.

Coreq.: MLT 3704.

Cross-Listed: MLS 3704L.

MLT 3706 Medical Laboratory Seminar 3 s.h.

Internship evaluation, special topics in the clinical laboratory. Case studies and interpretation of laboratory results.

Prereq.: Acceptance into 3716 or instructor permission.

Coreq.: MLT 3716.

MLT 3716 Clinical Internship 6 s.h.

Students will be placed at clinical sites for 40 hours per week for 7 weeks during the semester.

Prereq.: Permission of instructor.

Coreq.: MLT 3706 and MLT 3717.

MLT 3717 Clinical Microbiology Interpretation 1 s.h.

A study of the diagnostic procedures and interpretation of microbiological cultures relevant to the clinical laboratory.

Prereq.: Instructor Permission.

Coreq.: 3716 and 3706.

MLT 3787 Diagnostic Microbiology 3 s.h.

Clinical applications of human pathogenic microorganisms; infections, frequency, isolation, identification, and treatment of bacteria, fungi, viruses, and parasites. Case studies, problem solving, and quality assurance in clinical microbiology. Three hours lecture per week.

Prereq.: MLT 1501/L.

Coreq.: MLT 3787L.

MLT 3787L Diagnostic Microbiology Laboratory 2 s.h.

A clinical approach to the study of bacteria, fungi, viruses, and parasites. Methods to isolate and identify clinically significant pathogens from clinical specimens; case studies in clinical microbiology. Six hours lab per week. Identical with BIOL 3787L, MLS 3787L.

Prereq.: MLT 1501/L.

Coreq.: MLT 3787.

Public Health

PHLT 1513 Introduction to Environmental Health and Safety 3 s.h.

Provides an introduction to and overview of the key areas of environmental health, one of the core areas of public health. Using the perspectives of the population and community, the course will cover factors associated with the development of environmental health problems.

Gen Ed: Environ Sustain, Social Science, Social and Personal Awareness.

PHLT 1531 Fundamentals of Public Health 3 s.h.

Provides an introduction to public health concepts and practice by examining the philosophy, purpose, history, organization, functions, tools, activities, and results of public health at the national, state, and community levels. Introduces the core disciplines of public health, and current events and issues in the field.

Gen Ed: Social Science, Well Being, Social and Personal Awareness.

PHLT 1550 Public Health Advocacy and Policy 2 s.h.

Provide interdisciplinary education through the lens of public health to empower generations of educated citizens to create innovative solutions to 21st century health problems.

PHLT 1568 Healthy Lifestyles 3 s.h.

Personal and consumer health issues and prevention of premature death analyzed from physical, emotional, social and spiritual perspectives. Plans for disease prevention and healthful living. Importance of health promotion to the individual, region, nation and world.

Gen Ed: Social Science, Well Being, Social and Personal Awareness.

PHLT 1568H Honors Healthy Lifestyles 3 s.h.

Personal and consumer health issues and prevention of premature death analyzed from physical, emotional, social and spiritual perspectives. Plans for disease prevention and healthful living. Importance of health promotion to the individual, region, nation and world.

Gen Ed: Well Being, Social and Personal Awareness.

PHLT 2607 Ethical Issues in Public Health 3 s.h.

Examines practical aspects of ethics and public health. This course will help students develop the analytical skills necessary for evaluating ethical issues related to public health policy and public health prevention, treatment, and research.

PHLT 2692 Human Sexuality 3 s.h.

An interdisciplinary approach to the study of human sexuality.

Cross-Listed: PSYC 2692.

Gen Ed: Social Science, Well Being, Social and Personal Awareness.

PHLT 3702 Health Education Theory and Methods 3 s.h.

Overview of health education theory, history, ethics, and methods for the community, school, workplace and health care setting. Provides a foundation in teaching methods. Also listed as HEPE 3702.

PHLT 3708 Preventive Public Health Care 3 s.h.

Application of current health care philosophies in disease prevention. In-depth case study of a specific public health problem and its prevention. This is an online course.

Prereq.: None.

PHLT 3709 Elements of Urban Environmental Health Practices 3 s.h.

Focus on development and implementation issues of environmental and public health programs necessary for urban and rural communities to meet acceptable public health standards at the local health department level with emphasis on resources and staffing. This is an online course.

Prereq.: none.

PHLT 3715 Health Education for Grades PreK-6 3 s.h.

Comprehensive School Health Education curricula, methods and materials for teaching pre-kindergarten through sixth grade students. Also listed as HEPE 3715.

Prereq.: PHLT 1568, PHLT 3702 and BIOL 1545 or AHLT 1500 and AHLT 1501.

PHLT 3716 Health Education for Grades 7-12 3 s.h.

Comprehensive School Health Education curricula, methods and materials for teaching seventh through twelfth grade students.

Prereq.: PHLT 1568, PHLT 3702 and BIOL 1545 or AHLT 1500 and AHLT 1501.

PHLT 3725 Topics in Public Health 3 s.h.

Examines topics of relevance to public health. Specific topics include current issues and emerging research findings, with a focus on health behavior and health promotion, epidemiology, public health administration, environmental health, biostatistics, through analysis of public health problems, and application of principles and practices of public health.

PHLT 3731 Drug Use and Abuse 3 s.h.

Alcohol, tobacco, and other drug use and their relationship to behavior and society. Emphasis on prevention, early intervention, and treatment in the behavioral medicine, health care, educational and criminal justice systems.

PHLT 3757 Health and Disease 4 s.h.

Study of the major chronic and communicable diseases affecting humans. Emphasis on etiology, prevention through health education and health promotion methods, and materials.

Prereq.: BIOL 1545 or AHLT 1500 and AHLT 1501 or permission of the instructor.

PHLT 3791 Community Health 3 s.h.

Study of the need for organized community health efforts: problems of chronic and communicable diseases, environmental health, world health, and the public and private agencies involved in their solutions.

PHLT 4801 Field Work in Health Education 1-3 s.h.

Provides the public health major with a supervised teaching or agency experience. Three to twelve hours per week.

Prereq.: PHLT 3791.

PHLT 4808 Environmental Health Concerns 3 s.h.

Industrial hygiene, hazardous and infectious waste, air and quality, and sanitation policies in health care facilities. Pertinent federal, state, and local legislation.

Prereq.: none.

PHLT 4826 Community Health Planning and Promotion 4 s.h.

Fundamental techniques for assessing needs, planning, marketing and implementing health promotion programs in the workplace and community.

Prereq.: none.

PHLT 4827 Evaluation of Health Promotion Programs 3 s.h.

Theories and methods of program evaluation for assessing the quality of health promotion programs.

Prereq.: PHLT 4826.

PHLT 4828 Grant Writing 3 s.h.

Methods and techniques for writing grant proposals related to health. Emphasis on competence in development of narrative, program plan, evaluation design, time line, identifying grant sources and managing funded projects.

PHLT 4891 Public Health Internship 8 s.h.

Supervised experience designed to provide an opportunity to enable students to apply entry-level competencies acquired in the classroom setting to public health practice through experiential activities. The student will be required to be at the internship approximately 23-24 hours per week in a 15 week semester, for a total of 350 hours.

Prereq.: senior standing and consent of instructor.

PHLT 4892 Environmental Health and Safety Internship 8 s.h.

Supervised experience designed to provide an opportunity to enable students to apply entry-level competencies acquired in the classroom setting to environmental health practice through experiential activities. The student will be required to be at the internship approximately 23-24 hours per week in a 15 week semester, for a total of 350 hours.

Prereq.: senior standing and consent of instructor.

PHLT 4898 Environmental Health and Safety Senior Seminar 3 s.h.

Synthesis of professional course work. Development of resume and professional portfolio; preparation for internship; administration of outcome assessment instruments for public health majors.

Prereq.: senior standing and consent of instructor.

PHLT 4899 Public Health Senior Seminar 3 s.h.

Synthesis of professional course work. Development of resume and professional portfolio; preparation for internship; administration of outcome assessment instruments for public health majors; preparation for the CHES certification exam.

Prereq.: Senior standing and consent of instructor.

Gen Ed: Capstone.

PHLT 5804 Multicultural Health 3 s.h.

Explore multicultural models of health, illness, and treatments or therapies to increase understanding of various approaches to prevention, health promotion, healing, and maintenance of health and well-being.

Prereq.: Junior standing.

PHLT 5807 Epidemiology 3 s.h.

A study of the interrelationships of the host, agent, and environment in determining the causation, frequency, and distribution of disease. This is an online course.

Prereq.: None.

PHLT 5810 Agents of Mass Casualty 3 s.h.

Explorations of biological agents, chemical agents or radiological and nuclear devices, terrorism, security, emergency planning, and community and public health roles in the event of a deployment of these agents. Increase understanding through case analysis of how to apply course concepts to real world scenarios.

Prereq.: Junior standing.

PHLT 5812 Crisis Management in Public Health 3 s.h.

Exploration of roles, thought processes and actions of public health professionals during crisis situations, by understanding the anatomy of crises. Increase knowledge through case analysis of how to apply course concepts to real world scenarios.

Prereq.: Junior standing.

PHLT 5893 Workshop in Health Education 1-3 s.h.

Concentrated study of a selected topic related to health education. The department will select and announce the topic and determine the credit hours based on the frequency and duration of workshop meetings. May be repeated for a maximum of 6 s.h. with change in topic.

Prereq.: PHLT 3701, PHLT 3791 or permission of instructor.

PHLT 5893C CE Public Health Workshop 1-3 s.h.

Concentrated study of a selected topic related to health education. The department will select and announce the topic and determine the credit hours based on the frequency and duration of workshop meetings. May be repeated for a maximum of 6 s.h. with change in topic.

Prereq.: PHLT 3701, PHLT 3791 or permission of instructor.

Respiratory Care

RESC 1503 Respiratory Procedures 1 3 s.h.

Appropriate use of selected respiratory care procedures. Three hours lecture.

Coreq.: RESC 1503L.

RESC 1503L Respiratory Procedures 1 Lab 1 s.h.

Appropriate use of selected respiratory care procedures. Three hours lab.

Coreq.: RESC 1503.

RESC 1520 Respiratory Care Assessment 1 2 s.h.

Diagnostic techniques used in evaluating patients with cardiopulmonary disorders. Two hour lecture.

Coreq.: RESC 1520L.

RESC 1520L Respiratory Assessment 1 Lab 1 s.h.

Diagnostic techniques used in evaluating patients with cardiopulmonary disorders. Two hour lab.

Coreq.: RESC 1520.

RESC 1530 Foundations of Respiratory Care 3 s.h.

Review of the professional scope of practice for a respiratory therapist including key organizational roles within the profession. Basic application of scientific gas laws and theories will be examined along with basic description and function of oxygen delivery equipment related to respiratory care. Includes applied anatomy and physiology of the respiratory system and basic patient assessment. 3 hour lecture.

Prereq.: Acceptance into the respiratory care program or by a special permission from the program director.

RESC 2620 Respiratory Assessment 2 2 s.h.

Advanced techniques in the assessment of cardiopulmonary disorders. Two hours lecture.

Coreq.: RESC 2620L.

RESC 2620L Respiratory Assessment 2 Lab 1 s.h.

Advanced techniques in the assessment of cardiopulmonary disorders, Two hours lab.

Coreq.: RESC 2620.

RESC 2621 Cardiopulmonary Disease 3 s.h.

Comprehensive overview of cardiopulmonary disorders encountered by respiratory therapists. Includes applications to clinical protocols and evidence based practices.

Prereq.: RESC 2620.

RESC 2699 Clinical Practice 1 1 s.h.

Orientation to hospital and department policies, including exposure to and practice with basic respiratory care procedures. Five hours a week in clinics.

Prereq.: RESC 2621.

RESC 3706 Respiratory Procedures 2 2 s.h.

Airway management techniques and other critical care procedures. Two hours lecture.

Prereq.: acceptance into the respiratory care program.

Coreq.: RESC 3706L.

RESC 3706L Respiratory Procedures 2 Lab 1 s.h.

Airway management techniques and other critical care procedures. Three hours lab.

Prereq.: Acceptance into the respiratory therapy program.

Coreq.: RESC 3706.

RESC 3708 Respiratory Clinical Specialties 3 s.h.

Fundamentals of hemo-dynamic monitoring, management of burn patients, and assessment of neuro-trauma. Three hours lecture.

Prereq.: RESC 3706.

RESC 3709 Neonatal/Pediatric Respiratory Care 3 s.h.

Respiratory care applications in neonatal/pediatric settings. Three hours lecture.

Prereq.: Acceptance into the Respiratory Care Program.

Coreq.: RESC 3709L.

RESC 3709L Neonatal/Pediatric Respiratory Care Lab 1 s.h.

Respiratory care applications in neonatal/pediatric settings. Three hours lab.

Prereq.: Acceptance into the Respiratory Care program.

Coreq.: RESC 3709.

RESC 3710 Respiratory Care Pharmacology 3 s.h.

This course will review the therapeutic effects, side effects, indications and contraindications along with dosages, drug delivery routes as well as standard and modified delivery absorption methods of pulmonary related pharmacological agents and medications for aspects of pulmonary related medicine. 3 hour lecture.

Prereq.: none.

RESC 3720 Mechanical Ventilation 1 2 s.h.

Basic theory and application of mechanical ventilation in critical care areas. Two hours lecture.

Prereq.: Acceptance into the respiratory care program.

Coreq.: RESC 3720L.

RESC 3720L Mechanical Ventilation 1 Lab 1 s.h.

Basic theory and application of mechanical ventilation in critical care areas. Three hours lab.

Prereq.: Acceptance into the Respiratory Care Program.

Coreq.: RESC 3720.

RESC 3725 Mechanical Ventilation 2 2 s.h.

Advanced theory and application of mechanical ventilation. Includes home care ventilators. Two hours lecture to be taken concurrently with RESC 3720L.

Prereq.: RESC 3720.

RESC 3725L Mechanical Ventilation 2 Lab 1 s.h.

Advanced theory and application of mechanical ventilation. Includes home care ventilators. Three hours lab.

Prereq.: RESC 3720.

Coreq.: RESC 3725.

RESC 3731 Respiratory Care Management 3 s.h.

A study of the basic managerial process, organizational concepts, budgeting, quantitative planning, decision-making, and issues of control as they relate to the manager of a hospital-based respiratory care department.

Prereq.: RESC 3725.

RESC 3740 Clinical Practice 2 3 s.h.

Application of basic and advanced respiratory care modalities in the clinical hospital setting.

Prereq.: RESC 2699.

RESC 3741 Clinical Practice 3 3 s.h.

Application of basic and advanced respiratory care modalities for pediatric and adult patients. Twenty hours a week.

Prereq.: RESC 3740.

RESC 3765 Advanced Respiratory Care Diagnostics 3 s.h.

The study of the fundamentals of advanced respiratory care diagnostics. Three hour lecture.

Prereq.: none.

RESC 4801 Special Topics in Respiratory Care 1-3 s.h.

Focused research of a special problem/issue related to respiratory care. The topic of interest allows the student to participate in focused investigation of aspects of administration, clinical specialization, or research. May be repeated up to a total of 3 s.h.

Prereq.: acceptance in BSRC completion program, junior standing, or permission of instructor.

RESC 4813 Adult Cardiac and Pediatric Advanced Life Support 3 s.h.

This course is designed for healthcare providers who will participate in the management of cardio pulmonary resuscitation and will focus on advanced cardiopulmonary resuscitation modalities and hands on procedures for the adult and pediatric patient populations. Cardiovascular pharmacology, advanced airway management, vascular access, and resuscitation techniques used in the management of adult and pediatric cardiac emergencies will be explored. Successful completion of the course will result in AHA, ACLS and AHA PALS certifications. 3hour lecture.

Prereq.: Students need basic cardiac life support certification to take this course.

RESC 4831 Pulmonary Care Management 3 s.h.

Pathology as it relates to care of patients with pulmonary-related disorders.

Prereq.: RESC 3725.

RESC 4835 Clinical Practice 4 3 s.h.

Application of advanced respiratory modalities and diagnostics for pediatric and adult patients. Capstone course for RC program. Fifteen hours a week.

Prereq.: RESC 3741.

RESC 4838 Respiratory Seminar 1 1 s.h.

Review of current aspects of clinical respiratory care. A content analysis of the updated NBRC Entry-Level exam will be included.

Prereq.: RESC 3741.

RESC 4842 Respiratory Seminar 2 1 s.h.

Review of current aspects of clinical respiratory care. A content analysis of the updated NBRC Advanced Practitioner exam will be included.

Prereq.: RESC 4838.

RESC 4846 Sleep Diagnostics 1 3 s.h.

This course will explore Scientific theory and clinical techniques needed to perform polysomnography. The course is asynchronous web based.

RESC 4848 Sleep Diagnostics 2 3 s.h.

This course will explore theory, clinical techniques and interpretation of testing results related to polysomnography. The course is delivered asynchronous web-based.

RESC 4867 Fundamentals of Leader Development 3 s.h.

This course will form the necessary core of self-awareness in relation to leader development. Through introducing concepts and examples of leadership and awareness of how one leads as an expression of self, RCPs will enhance leadership awareness and personal expression within their discipline.

RESC 4870 Advanced Cardiopulmonary Case Management 3 s.h.

This course is designed to strengthen the student's knowledge of C-P disorders by incorporating evidence-based practices into C-P case management. The student will learn to apply these strategies in acute care, transitional and long-term care settings. Current protocols will also be discussed.

Prereq.: none.

RESC 5820 The Respiratory Care Profession 3 s.h.

Study of origins, current role, and future directions of respiratory care profession within the framework of the current health care environment. Examination of professional resources is also included.

Prereq.: Active membership in American Association for Respiratory Care and acceptance in MRC program.

RESC 5860 Technology Applications for Health and Human Services 3 s.h.

Exploration of technology applications for education, presentations, communications and management in Health and Human Service disciplines. Creation of digital media such as audio and/or video files, spreadsheet macros, e-portfolios and Web-based applications of various technologies will be required. Application of technology to education, supervision or management will be evaluated through completion of a technology-enhanced project.

Prereq.: Acceptance in MRC program.

Prereq. or Coreq.: Permission from program director if outside of the respiratory care program.

RESC 5880 Advanced Management of the Ventilator Patient 3 s.h.

Course will present current classifications, evidence-based research and application of mechanical ventilator concepts in critical care areas. Technical capabilities of modes will be described along with optimal settings. Current protocols in RC will also be discussed.

Prereq.: Acceptance in the BSRC, BSRC degree advancement/completion program or Master of respiratory care program, junior standing, or permission of program director.