

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. Certificate programs are offered in paramedic and polysomnography.

Associate degree programs are offered in:

- emergency medical services
- medical assisting technology
- medical laboratory technology

Baccalaureate programs are offered in:

- allied health
- public health
- medical laboratory science (medical technology)
- dental hygiene
- respiratory care

A master's degree programs are offered in:

- health and human services (health promotion, administration for health and human services, and health informatics tracks)
- public health
- respiratory care

The master's degree program in respiratory care is available for licensed respiratory therapists. For more information regarding the Master of Respiratory Care, Master of Health and Human Services, or the Master of Public Health, refer to the Graduate Catalog.

The allied health, public health, associate to bachelors in respiratory care completion program, master of health and human services, and master of respiratory care programs can be completed in a web-based distance education delivery format. Details on program requirements appear under the specific program heading.

Admission to all programs except medical assisting technology and public health is on a restricted basis, since only a limited number of students can be accommodated. Detailed information on admission criteria and closing dates for application is available in the Department of Health Professions, the Bitonte College of Health and Human Services Dean's Office, or the Admissions Office.

Allied Health Program

The department offers a baccalaureate program leading to the degree Bachelor of Science in Applied Science (BSAS) with a major in allied health. This program is intended to serve paramedical professional health associate degree graduates who wish to upgrade their academic credentials to include the baccalaureate degree. Major courses in this program are available online, allowing students to complete coursework at a time and location convenient to them.

Online Undergraduate Degree Programs

- Bachelor of Science in Applied Science, Allied Health
- Bachelor of Science in Applied Science, Public Health

For additional information, please visit the Office of Distance Education. (<http://cms.ysu.edu/administrative-offices/distance-education/distance-education>)

You can contact the Office of Distance Education by e-mail at distanceed@ysu.edu or by phone at (330) 941-1516.

For more information, visit the **Department of Health Professions** (p. 1).

Chair

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Lecturer

Ronald K. Chordas, Ph.D., Lecturer

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

Susan E. Kearns, M.S.N., Senior Lecturer

Majors

- Allied Health Baccalaureate - Completion Program (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/allied-health-baccalaureate-completion-program>)
- Medical Laboratory Technician (MLT-AAS) (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/medical-laboratory-technician-mlt-aas>)
- Medical Laboratory Science (MLS-BSAS) (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/medical-laboratory-science-mls-bsas>)
- Public Health, Health Education/Health Promotion Track (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/public-health-health-education-health-protection-track>)
- Public Health, Environmental Health Track (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/public-health-environmental-health-track>)
- Dental Hygiene (<http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/dental-hygiene>)

- Emergency Medical Services (<http://catalog.yzu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/aas-emergency-medical-services>)
- Medical Assisting Technology (<http://catalog.yzu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/medical-assisting-technology>)
- BS in Respiratory Care (<http://catalog.yzu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/bs-respiratory-care>)

Certificate

- Health Information Systems (<http://catalog.yzu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/health-information-systems-certificate>)

Minors

- Minor in Community Health Planning and Evaluation (<http://catalog.yzu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/minor-community-health-planning-evaluation>)
- Minor in Public Health (<http://catalog.yzu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/minor-public-health>)
- Minor in Environmental Health and Safety (<http://catalog.yzu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/minor-environmental-health-safety>)

Allied Health

AHLT 1500 Introduction to Online Learning in Health Professions 3 s.h.
Prepare students to take online courses including the use of the Blackboard learning environment and orient students to YSU and YSU's Health Professions programs. Help students acquire basic skills to be successful in online learning and emphasize skills and resources necessary to be successful in their personal, academic and career-related pursuits. In addition, this course will introduce students to topics such as career assessment and how to become a successful health professional in the 21st Century. Should be taken during a student's first 30 hours at YSU. Listed also as PHLT 1500 and RESC 1500.

Prereq.: PHLT, AHLT or RESC major.

AHLT 1502 Applied Pathophysiology 4 s.h.
Introduction to clinical anatomy, physiology, and pathophysiology with application to acute and chronic illness.

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, creditably and usefulness to clinical decision making. Allows for application of research results in the clinical setting.

Prereq.: MATH 2623 or consent of the instructor.

AHLT 3705 Pharmacotherapeutics 3 s.h.
Advanced concepts and integration of various drug interactions as applied to modern drug therapy. Analysis of drug regimens related to a broad spectrum of pathologic conditions.

Prereq.: BIOL 1545 or BIOL 1551 and BIOL 1552, MATC 2605, or permission of instructor.

AHLT 3706 Practice Management for Dental Hygiene 3 s.h.
Management of dental hygiene care including appointment control, developing and maintaining recall systems, and insurance management. Dental marketing problem solving and the business relationship between dental patients and dental hygiene professionals.

Prereq.: DHYG 2628.

AHLT 3707 Clinical Informatics for the Healthcare Provider 3 s.h.
Application of health informatics by the practicing clinician in the clinical setting. Foundational and Structural Interoperability is provided to address the changing health care needs within the United States.
Prereq.: AHLT 3711 or consent of the instructor.

AHLT 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.
Prereq.: BIOL 1545 or BIOL 1551 and BIOL 1552, or permission of instructor.

AHLT 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. AHLT 3708, or permission of instructor. Also listed as PHLT 3709.

AHLT 3710 Gerodontology 3 s.h.
In-depth study of geriatrics as it relates to dental hygiene care and specific concerns of the elderly. An extramural experience with a geriatric patient.
Prereq.: DHYG 1513.

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.
Prereq.: AHLT 3704 or consent of instructor.

AHLT 3717 Health Care Policy 3 s.h.
A comprehensive overview of the American healthcare system. Particular attention given to the design and implementation of the Affordable Care Act.
Prereq.: BIOL 1545 or EMS 1501 or MATC 2600 or MLT 1501 or AHLT major or POL 1560 or permission of instructor.

AHLT 3720 EMS Management 3 s.h.
A review of EMS system design, staffing, chain of command, medical education, policies and procedures, record keeping, inter-agency relationships, community resources and involvement, and legal aspects relevant to private and public emergency medical services.
Prereq.: EMS 2614.

AHLT 3721 Pediatric Emergency Care 3 s.h.
A study of the pathophysiology, symptomatology, advanced diagnostic and therapeutic techniques of medical and traumatic emergencies unique to the pediatric patient.
Prereq.: EMS 2640.

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.
Prereq.: BIOL 1545 or BIOL 1551 and BIOL 1552, or permission of instructor.

AHLT 3745 Impact of Medical Records on Healthcare Reimbursement 3 s.h.
This course is designed to provide the Health Care Professional with knowledge of private, group and government insurance submissions, as well as the diagnostic and procedural coding system to manage electronic medical records. A review of ethical and legal requirements will be examined in relation to laws and regulations as they apply to insurance submission and electronic health records as well.
Prereq.: MATC 2602, MATC 2612 or MATC 2600 or approval from instructor.

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.
Prereq.: AHLT 3708.

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 s.h.

Prereq.: AHLT 5840 or permission of instructor.

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.

Prereq.: AHLT 5840 or permission of instructor.

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.

Prereq.: AHLT 5840 or PHLT 3701 or permission of instructor.

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.

Prereq.: AHLT 3704.

AHLT 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.: AHLT 3708 or permission of instructor.

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.

Prereq.: AHLT 5840, AHLT 4805, or permission of instructor.

AHLT 4812 Advanced Cardiac Life Support 3 s.h.

ECG interpretation, cardiovascular drug pharmacology, airway management and resuscitation techniques used in the management of cardiac emergencies. The course exceeds the objectives of the American Heart Association's Advanced Cardiac Life Support program for initial certification or recertification. Two hours lecture, three hours laboratory.

Prereq.: AHLT 3705 or permission of instructor.

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

Twelve-lead ECG interpretation, cardiovascular pharmacology, advanced airway management, vascular access, and resuscitation techniques used in the management of adult cardiac and pediatric emergencies. Successful completion of the course will result in AHA ACLS and PALS certification. Two hours of lecture and three hours of lab.

Prereq.: AHLT 3705 or permission of instructor.

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 4825 Patient Advocacy for the Health Professional 3 s.h.

This course is designed for the health care professional and focuses on basic concepts of patient advocacy in healthcare facilities. Examines the problems in healthcare quality and how advocacy by professionals can ensure that best practices are adopted. An emphasis on conceptual frameworks, debates, and ethical issues within the field are utilized. Patient centered care, patient safety systems, patient involvement and leadership design, delivery and access will be addressed.

Prereq.: Junior Status, AHLT 3708, or consent of the instructor.

AHLT 4831L Industrial Hygiene Laboratory 1 s.h.

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

AHLT 4835 Health Care Diversity 1 s.h.

Strategies of communication that enable the student to understand socioeconomic, political, ethnic, and religious diversity in health care.

Prereq.: AHLT 5840 or permission of instructor.

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.

Prereq.: AHLT 3708, AHLT 5807 or permission of instructor.

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.

Prereq.: AHLT 3708, AHLT 4808 or permission of instructor.

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.

Prereq.: AHLT 3708 or permission of instructor.

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. Eight 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 2 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.

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.

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

Coreq.: DHYG 4845.

DHYG 4850 Dental Public Health 3 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.

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.

EMS 2613 Critical Care Paramedic 3 s.h.

In-depth study of the underlying abnormalities and physiologic disturbances resulting from traumatic injuries and medical illnesses as it relates to emergency medical care. Includes analysis of case studies. Must be taken concurrently with EMS 2614.

Prereq.: EMS 2609, or permission of instructor.

EMS 2614 Critical Care Paramedic Laboratory 1 s.h.

Designed to prepare the student as a competent care provider in the transport of critical patients by ground or air unit. Topics include 12-leads, IABPs, RSI, lab data, EtCO₂ monitoring, and advance pharmacology. Must be taken concurrently with EMS 2613.

Prereq.: NREMT and permission of instructor.

EMS 2631 Advanced Clinical and Field Internship Experience 2 s.h.

Field internship in a variety of advanced life-support units to expose the student to hospital-based, public third service, private, and fire service EMS. Includes a field component involving wilderness rescue and emergency medicine. Must be taken concurrently with EMS 2613.

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.

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

Concurrent with: MLS 1501L.

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.

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

Concurrent with: MLS 1501.

MLS 3700 Clinical Chemistry 2 3 s.h.

Instrumentation and clinical relevance of applied chemical techniques including immunoassays, therapeutic drug monitoring, enzymes, trace elements, and point-of-care technology; quality control and assurance, case studies, and problem solving in clinical chemistry.

Prereq.: MLT 2601 or CHEM 1515.

Concurrent with: MLS 3700L.

MLS 3700L Clinical Chemistry 2 Laboratory 1 s.h.

Thyroid, digoxin, B12, folic acid, antinuclear antibodies and T and B cell receptor procedures utilized in a clinical laboratory. Three hours lab per week.

Prereq.: MLT 2601, MLT 2601L or CHEM 1515.

Concurrent with: MLS 3700.

MLS 3701 Clinical Hematology 1 3 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 and 3 hours of laboratory per week.

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

MLS 3701L Clinical Hematology 1 Laboratory 0 s.h.

Clinical Hematology 1 Laboratory.

MLS 3702 Clinical Hematology 2 3 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 and 3 hours of laboratory per week.

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

MLS 3702L Clinical Hematology 2 Laboratory 0 s.h.

Clinical Hematology 2 Laboratory.

MLS 3703 Clinical Immunology 3 s.h.

Fundamentals of immunology, including both humoral and cellular immunological responses. Applications of immunological methods in medical research and patient treatment. Recommended BIOL 3702.

Prereq.: BIOL 2601.

MLS 3703L Clinical Immunology Laboratory 1 s.h.

VDRL, ASO, febrile, latex, pregnancy, and viral tests; flocculation, precipitation, complement fixation, and titration procedures for various diseases. Three hours lab per week. Identical with MLT 3703L and BIOL 3703L.

Prereq.: MLS 1501, MLS 1501L, BIOL 2602.

Concurrent with: MLS 3703.

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.: BIOL 2602.

Concurrent with: 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.: BIOL 2602.

Concurrent with: MLS 3787.

MLS 4800 Advanced Clinical Chemistry 4 s.h.

Didactics and critical analysis of clinical chemistry. Four hours of lecture. Grading is Traditional or PR.

Prereq.: Acceptance into a clinical internship.

MLS 4800L Advanced Clinical Chemistry Clinical Experience 2 s.h.

Clinical experience and critical analysis of clinical chemistry; Competency based clinical practice. Grading is Traditional or PR.

Prereq.: Acceptance into a clinical internship.

MLS 4801 Advanced Hematology 4 s.h.

Diacritics and clinical analysis of clinical hematology. Four hours of lecture. Grading is Traditional or PR.

Prereq.: Acceptance into a clinical internship.

MLS 4801L Advanced Hematology Clinical Practice 3 s.h.

Clinical practice of clinical hematology. Competency based clinical practice. Grading is Traditional PR.

Prereq.: Acceptance into a clinical internship.

MLS 4802 Advanced Immunohematology 4 s.h.

Didactics and critical analysis of blood banking, Immunohematology, and Transfusion Medicine. Four hours of lecture. Grading is Traditional or PR.
Prereq.: Acceptance into a clinical internship.

MLS 4802L Advanced Immunohematology Clinical Practice 3 s.h.

Clinical practice and critical analysis of blood banking, Immunohematology, and Transfusion Medicine. Competency based clinical practice. Grading is Traditional or PR.

Prereq.: Acceptance into a clinical internship.

MLS 4803 Advanced Microbiology 5 s.h.

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

Prereq.: Acceptance into a clinical internship.

MLS 4803L Advanced Microbiology Clinical Practice 3 s.h.

Clinical practice and critical analysis of bacteriology, mycology, virology, and parasitology. Competency based clinical practice. Grading is Traditional or PR.

Prereq.: Acceptance into a clinical internship.

MLS 4804 Miscellaneous Clinical Experience 4 s.h.

Didactic and clinical analysis of specimen collection and processing. Management, education, molecular diagnostics, hemostasis, clinical immunology, and urinalysis and body fluids. Four hours of lecture. Capstone course requiring laboratory research project. Grading is Traditional or PR.

Prereq.: Acceptance into a clinical internship.

MLS 4804L Miscellaneous Clinical Practice 2 s.h.

Clinical practice and critical analysis of specimen collection and processing, management, education, molecular diagnostics, hemostasis, clinical immunology, and urinalysis and body fluids. Competency based clinical practice. Capstone course requiring laboratory research project. Grading is Traditional or PR.

Prereq.: Acceptance into a clinical internship.

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

Concurrent with: MLT 1501L.

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.

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

Concurrent with: MLT 1501.

MLT 1502 Urinalysis and Body Fluids 2 s.h.

Theory and techniques in the analysis of urine and body fluids.

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

Concurrent with: MLT 1502L.

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

Chemical and microscopic analysis of urine. Three hours lab per week.

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

Concurrent with: MLT 1502.

MLT 1503 Immunohematology 3 s.h.

Fundamental theories and techniques of immunohematology and blood banking; genetic theories, problem solving, and case studies.

Prereq.: BIOL 2601 and MLT 1501.

Concurrent with: MLT 1503L and BIOL 2602.

MLT 1503L Immunohematology Laboratory 1 s.h.

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

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

Concurrent with: MLT 1503.

MLT 2601 Clinical Chemistry 1 2 s.h.

Medical laboratory applications of clinical chemistry.

Prereq.: MLT 1501, MLT 1501L, CHEM 1515.

Concurrent with: MLT 2601L.

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

Spectrophotometric, semi-automated, and automated analysis of glucose, electrolytes, enzymes, and other chemical constituents of serum. Three hours lab per week.

Prereq.: MLT 1501, MLT 1501L, CHEM 1515.

Concurrent with: MLT 2601.

MLT 2603 Topics in Medical Laboratory Technology 4 s.h.

Clinical laboratory applications to molecular diagnostics, serology, virology and parasitology. Regulations, information processing, education, ethical, professional issues. Critical analysis of clinical laboratory information. Two hours lecture and six hours laboratory per week.

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

MLT 2687L Microbiology for Health Care Laboratory 1 s.h.

Medical microbiology laboratory for health care professionals. Laboratory methods in the transmission, identification, prevention, and treatment of common bacterial, viral, fungal, and parasitic pathogens with a focus on nosocomial infections. Three hours lab per week.

Prereq.: BIOL 1545, BIOL 1551, BIOL 2601, or permission of instructor.

Concurrent with: BIOL 1560.

MLT 3700 Clinical Chemistry 2 3 s.h.

Instrumentation and clinical relevance of applied chemical techniques including immunoassays, therapeutic drug monitoring, enzymes, trace elements, and point-of-care technology; quality control and assurance, case studies, and problem solving in clinical chemistry.

Prereq.: MLT 2601 or CHEM 1515.

Concurrent with: MLT 3700L.

MLT 3700L Clinical Chemistry 2 Laboratory 1 s.h.

Thyroid, digoxin, B12, folic acid, antinuclear antibodies and T and B cell receptor procedures utilized in a clinical laboratory. Three hours lab per week.

Prereq.: MLT 2601, MLT 2601L or CHEM 1515.

Concurrent with: MLT 3700.

MLT 3701 Clinical Hematology 1 3 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 and 3 hours of laboratory per week.

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

MLT 3701L Clinical Hematology 1 Laboratory 0 s.h.

Clinical Hematology 1 Laboratory.

MLT 3702 Clinical Hematology 2 3 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 and 3 hours of laboratory per week.

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

MLT 3702L Clinical Hematology 2 Laboratory 0 s.h.

Clinical Hematology 2 Laboratory.

MLT 3703L Clinical Immunology Laboratory 1 s.h.

VDRL, ASO, febrile, latex, pregnancy, and viral tests; flocculation, precipitation, complement fixation, and titration procedures for various diseases. Three hours lab per week. Identical with MLS 3703L and BIOL 3703L.

Prereq.: MLS 1501, MLS 1501L, BIOL 2602.

Concurrent with: MLS 3703.

MLT 3706 Medical Laboratory Seminar 2 s.h.

Internship evaluation, special topics in the clinical laboratory. Case studies in the clinical laboratory.

Prereq.: MLT 2603.

Concurrent with: MLT 3716.

MLT 3710 Interpretation of Clinical Laboratory Results 1 s.h.

The significance of laboratory results and how they relate to gender and age.

Prereq.: MLT 2601, MLT 2601L or permission of instructor.

MLT 3716 Clinical Internship 8 s.h.

Thirty-six hours per week of practical application of skills in affiliate hospitals and private laboratories.

Prereq.: completion of 30 s.h. of MLT curriculum with a grade of "C" or better and a minimum 2.5 GPA.

Concurrent with: MLT 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.: BIOL 2602.

Concurrent with: 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. 2 s.h.

Prereq.: BIOL 2602.

Concurrent with: MLT 3787.

Public Health

PHLT 1500 Introduction to Online Learning in Health Professions 3 s.h.

Prepare students to take online courses including the use of the Blackboard learning environment and orient students to YSU and YSU's Health Professions programs. Help students acquire basic skills to be successful in online learning and emphasize skills and resources necessary to be successful in their personal, academic and career-related pursuits. In addition, this course will introduce students to topics such as career assessment and how to become a successful health professional in the 21st Century. Should be taken during a student's first 30 hours at YSU. Listed also as AHLT 1500 and RESC 1500.

Prereq.: PHLT, AHLT or RESC major.

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: Environmental Sustainability, 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 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: 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.

Prereq.: PHLT 1531 or PHLT 1568.

PHLT 2692 Human Sexuality 3 s.h.

An interdisciplinary approach to the study of human sexuality.

Prereq.: PHLT 1568.

Cross listed with PSYC 2692.

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.

Prereq.: PHLT 1568.

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. AHLT 3708, or permission of instructor. Also listed as AHLT 3709.

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.

Prereq.: PHLT 1531.

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.

Prereq.: PHLT 1568.

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

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.

Prereq.: PHLT 1568.

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

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

Prereq.: PHLT 3701L and PHLT 3791.

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.: PHLT 3791 and AHLT 5807.

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.

Prereq.: PHLT 4826 and PHLT 4827.

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.: PHLT 1568 or PHLT 1531 and junior standing.

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.: PHLT 1531 or PHLT 1568 and 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.: PHLT 1531 or PHLT 1568 and 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.

Respiratory Care

RESC 1500 Introduction to Online Learning in Health Professions 3 s.h.

Prepare students to take online courses including the use of the Blackboard learning environment and orient students to YSU and YSU's Health Professions programs. Help students acquire basic skills to be successful in online learning and emphasize skills and resources necessary to be successful in their personal, academic and career-related pursuits. In addition, this course will introduce students to topics such as career assessment and how to become a successful health professional in the 21st Century. Should be taken during a student's first 30 hours at YSU. Listed also as PHLT 1500 and AHLT 1500.

Prereq.: PHLT, AHLT or RESC major.

RESC 1503 Respiratory Procedures 1 4 s.h.

Appropriate use of selected respiratory care procedures. Three hours lecture, three hours lab.

Prereq.: RESC 1531.

RESC 1520 Respiratory Care Assessment 1 3 s.h.

Diagnostic techniques used in evaluating patients with cardiopulmonary disorders. Two hour lecture, two hours lab.

Prereq.: RESC 1530.

RESC 1529 Respiratory Care Orientation 2 s.h.

Scope of profession including key organizations, role within health-care system and career options. Includes applied anatomy and physiology of respiratory system and basic assessment and therapeutic procedures. Hospital experiences included. One hour lecture and two hours lab.

RESC 1531 Respiratory Care Essentials 3 s.h.

Application of basic scientific principles to the respiratory-care profession. Includes coverage of basic equipment, assessment techniques, and therapeutic procedures. Two hours lecture and two hours lab.

RESC 2620 Respiratory Assessment 2 3 s.h.

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

RESC 2621 Cardiopulmonary Disease 4 s.h.

Comprehensive overview of cardiopulmonary disorders encountered by respiratory therapists. Includes applications to clinical protocols.

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 3 s.h.

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

Prereq.: RESC 2620.

RESC 3708 Respiratory Clinical Specialties 3 s.h.

Fundamentals of hemodynamic monitoring, management of burn patients, and assessment of neurotrauma. Two hours lecture, three hours lab.

Prereq.: RESC 3706.

RESC 3709 Neonatal/Pediatric Respiratory Care 4 s.h.

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

Prereq.: RESC 3706.

RESC 3720 Mechanical Ventilation 1 3 s.h.

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

Prereq.: RESC 3708.

RESC 3725 Mechanical Ventilation 2 3 s.h.

Advanced theory and application of mechanical ventilation. Includes home care ventilators. Two hours lecture, three hours lab.

Prereq.: RESC 3720.

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 4 s.h.

Application of basic and advanced respiratory care modalities. Three hour lab, twenty clinical hours per week.

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 3750 Pulmonary Rehabilitation 2 s.h.

Demonstration of the multidisciplinary nature of a pulmonary rehabilitation program. The role of the respiratory care practitioner in preventive care activities.

Prereq.: RESC 3706.

RESC 3765 Advanced Respiratory Care Diagnostics 3 s.h.

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

Prereq.: RESC 3708 or permission of instructor.

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 4810 Advanced Neonatal and Pediatric Case Management 3 s.h.

This course is designed to strengthen the student's knowledge of Neonatal/Pediatric disorders by incorporating evidence-based practices into case management. Current protocols will also be discussed.

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

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.

Scientific theory and clinical techniques needed to perform polysomnography. Two hours lecture, two hours lab.

Prereq.: Senior standing and RESC 3740.

RESC 4847 Sleep Clinics 1 1 s.h.

Polysomnographic techniques in the clinical setting. Approximately 80 contact hours for each course.

Prereq.: Senior standing and RESC 4846.

RESC 4848 Sleep Diagnostics 2 3 s.h.

Scientific theory and clinical techniques needed to perform polysomnography. Two hours lecture, two hours lab.

Prereq.: Senior standing and RESC 4846.

RESC 4849 Sleep Clinics 2 1 s.h.

Polysomnographic techniques in the clinical setting. Approximately 80 contact hours for each course.

Prereq.: Senior standing and RESC 4848 and RESC 4847.

RESC 4860 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 BSRC completion program, junior standing, or permission of instructor.

RESC 4862 Professional Pathways for Respiratory Care Practitioners 3 s.h.

This course will explore select professional pathways available to the RCP. The foundations and role of the RCP are examined in four key areas: the sleep center, home care, PFT lab and HBO centers. The RCP will be introduced to the standards of care and practical application for each area.

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

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.

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

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

RESC 4872 Technology Applications for RCPs 3 s.h.

Exploration of technology applications for education, presentations, communications and management. Creation of digital media such as audio and/or video files, e-portfolios and web-based application of various technologies will be required. Application of technology to education or management will be evaluated through completions of a technology-enhanced project.

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