RESPIRATORY CARE - RES

ALH 501 Health Promotion and Disease Prevention 3 Credits
This course will provide students with information that will enable them to
develop a practical approach to health promotion and disease prevention for
a specific target population. Specifically, the course is designed to help in
the development of programs within schools, communities, and the work-
place.
Offered: summer & fall, occasionally spring; online only.

ALH 503 Medical Nutrition Therapy 3 Credits
This course will explore the application of nutrition principles to the
treatment and prevention of diseases. This treatment can range from
changes in diet to providing specialized therapies such as intravenous or tube
feeding. Topics discussed will include lifestyle strategies and therapeutic
nutrient intervention to correct nutritional insufficiencies, promote optimal
health, and prevent, manage, or correct medical problems.
Offered: fall & spring, online only.

ALH 602 Cardiopulmonary Pathophysiology 3 Credits
Details the functions of the cardiovascular and respiratory systems
emphasizing normal function, pathophysiology, initiation and progression of
disease and current treatment. Special reference will be made to the role of
exercise as a therapeutic modality.
Prerequisite: ALH 602.
Offered: every fall, online only.

ALH 621 Cardiopulmonary Pharmacodynamics 3 Credits
This course provides study of the current medications used in the treatment
of congestive heart failure, coronary artery disease, arrhythmias, angina and
hypertension, asthma and COPD. The effects of these medications during
acute and chronic exercise and cardiac emergency medications will also be
covered.
Prerequisite: ALH 602.
Offered: every fall, online only.

ALH 631 Research Methods in Allied Health 3 Credits
An intermediate graduate-level course designed to familiarize students with
the elements of research methods with special emphasis on experimental
and quasi-experimental research techniques most commonly used in the
allied health professions. The course also examines issues that deal with
ethical aspects of human experimentation. Special emphasis will be placed
on preparing the student to be able to critically analyze and interpret
research literature. By the end of the course, the student is expected to
complete the majority of a viable research proposal. By the end of
the course students will be able to properly read and critique scientific
literature.
Offered: fall, spring, & summer; online only.

ALH 689 Master’s Project 3 Credits
The master’s project is designed as a rigorous scholarly activity that provides
an opportunity to integrate theoretical knowledge with research.
Prerequisite: permission of program director.
Offered: fall, spring & summer.

ALH 699 Masters Project II 3 Credits
Continues ALH 689 with an approved thesis proposal by collecting and
analyzing data, and culminates in an approved written thesis.
Prerequisite: ALH 689 & permission of program director.
Offered: fall, spring & summer.

RES 512 Pulmonary Function Testing 3 Credits
A study of pulmonary diagnostic techniques, with an emphasis on pulmonary
function testing and interpretation.
Offered: every spring, online only.

RES 522 Adult Learning Theory 3 Credits
The concept of lifelong learning has become an increasing reality as adults
continually engage in learning activities, whether through their employer,
institutions of higher education, or self-directed study. This course will
examine the social and psychological aspects of adult development and
learning, including the various motivations of adult learners. Students will
also learn various methods of training and development, as well as specific
instructional practices.
Offered: every fall, online only.

RES 615 Advanced Topics in Ventilatory Support 3 Credits
Advanced study in methods of mechanical ventilatory support. Patient
assessment by advanced monitoring is stressed, with attention to patient
ventilator interactions, optimization of ventilatory support, and weaning of
marginal patients. New ventilation technology and modes of support are
discussed.
Prerequisite: ALH 602 and 621.
Offered: every fall, online only.

RES 618 Pulmonary and Cardiac Rehabilitation 3 Credits
This course explores pulmonary/cardiac rehabilitation clinics and combines
exercise training with behavioral and educational programs designed to help
patients with COPD and cardiac issues control symptoms and improve day-
to-day activities. We will look at the team approach—patients work closely
with their doctors; nurses; respiratory, physical, and occupational therapists;
psychologists, exercise specialists; and dietitians. We will also explore the
differences between cardiac and pulmonary rehabilitation.
Offered: every spring, online only.

RES 612 Advanced Cardiopulmonary Monitoring 3 Credits
This course is an overview of invasive and noninvasive cardiopulmonary
monitoring, emphasizing theory of operation and techniques. Topics
include physiologic principles of hemodynamic monitoring, pulmonary
artery catheter use, respiratory gas monitoring, noninvasive and minimally-
vasive hemodynamic monitoring, clinical applications of hemodynamic
and respiratory gas monitoring, work of breathing determinations, and
respiratory muscle strength.
Prerequisites: ALH 602 and ALH 621.
Offered: every fall, online only.

RES 619 Adult Learning Theory 3 Credits
The concept of lifelong learning has become an increasing reality as adults
continually engage in learning activities, whether through their employer,
institutions of higher education, or self-directed study. This course will
examine the social and psychological aspects of adult development and
learning, including the various motivations of adult learners. Students will
also learn various methods of training and development, as well as specific
instructional practices.
Offered: every fall, online only.