

PRE-RESPIRATORY THERAPY

GUIDE



Respiratory therapists care for patients who have trouble breathing; for example, from a chronic respiratory disease, such as asthma or emphysema. Their patients range from premature infants with undeveloped lungs to elderly patients who have diseased lungs. They also provide emergency care to patients suffering from heart attacks, drowning, or shock. Respiratory therapists typically do the following:

- Interview and examine patients with breathing or cardiopulmonary disorders
- Consult with physicians to develop patient treatment plans
- Perform diagnostic tests such as measuring lung capacity
- Treat patients, using a variety of methods, including chest physiotherapy and aerosol medications
- Monitor and record the progress of treatment
- Supervise respiratory therapy technicians during tests and evaluate the findings of the tests
- Teach patients how to use treatments

Respiratory therapists use various tests to evaluate patients. For example, therapists test lung capacity by having patients breathe into an instrument that measures the volume and flow of oxygen when they inhale and exhale. Respiratory therapists may also take blood samples and use a blood gas analyzer to test the oxygen and carbon dioxide levels present. Respiratory therapists perform chest physiotherapy on patients to remove mucus from their lungs and make it easier for them to breathe. Removing mucus is necessary for patients suffering from lung diseases, such as cystic fibrosis, and involves the therapist vibrating the patient's rib cage, often by tapping the patient's chest and encouraging him or her to cough. Respiratory therapists may connect patients who cannot breathe on their own to ventilators to deliver oxygen to the lungs. Therapists insert a tube in the patient's windpipe (trachea), and connect the tube to ventilator equipment. They set and monitor the equipment to ensure that the patient is receiving the correct amount of oxygen at the correct rate. Respiratory therapists who work in home care teach patients and their families to use ventilators and other life-support systems in their homes. During these visits, they may inspect and clean equipment, check the home for environmental hazards, and ensure that patients know how to use their medications. Therapists also make emergency home visits when necessary. In some hospitals, respiratory therapists are involved in related areas, such as counseling people on how to stop smoking and diagnosing breathing problems for people with sleep apnea. (Occupational Outlook Handbook)

Degree Options in Respiratory Therapy

Students may enter the respiratory therapy profession at the **Bachelor's Degree level or the Master's Degree level**. Requirements for both options are described below.

Option 1 - Bachelor's Degree Program: Students may receive a Bachelor of Science Degree in Applied Health Sciences from the University of Nebraska at Kearney after satisfactory completion of a program consisting of 85 semester hours of pre-respiratory therapy and a fourth (12 month) clinical year at Nebraska Methodist college, an affiliated School of Respiratory Therapy. Gaining acceptance into a respiratory therapy professional clinical training program is a competitive process. Completion of the pre-requisite courses does not automatically guarantee admission. The following courses are required prior to application for the respiratory therapy training portion of the program at Nebraska Methodist:

A. Required Courses

| rake all of the following: | | |
|----------------------------|--|---|
| BIOL 211 | Human Microbiology | 4 |
| BIOL 225 | Anatomy and Physiology | 4 |
| BIOL 226 | Anatomy and Physiology | 4 |
| BIOL 325 | Medical Terminology | 1 |
| ENG 102 | Academic Writing and Research | 3 |
| MATH 102 | College Algebra | 3 |
| SOC 100 | Intro to Sociology | 3 |
| Take one of the following: | | |
| CHEM 145 | Introductory Chemistry | 4 |
| CHEM 148 | Introductory Chemistry for Health Sciences | 4 |
| CHEM 160 | General Chemistry | 4 |
| Take one of the following: | | |
| PHYS 203 | Physics for Allied Health | 4 |
| PHYS 205 | General Physics | 5 |
| Take one of the following: | | |
| PSY 203 | General Psychology | 3 |
| PSY 230 | Human Development | 3 |
| | | |

B. Respiratory Therapy Electives: Take courses from the following list of electives to reach a total of 85 credit hours. A minimum of 5 hours must be upper division (300-400).

BIOL 110

| BIOL 110 | Introduction to Epidemiology | |
|------------|---|---|
| BIOL 311** | Bioethics | 3 |
| BIOL 461 | Human Genetics | |
| CSP 417 | Counseling Skills | 3 |
| ECON 410 | Health Care Economics | 3 |
| HSCI 125G | Orientation to Respiratory Therapy | 1 |
| HSCI 140 | Introduction to Public Health | 3 |
| HSCI 300 | Seminar in Health Sciences | 1 |
| MGT 380 | Human Resource Management | 3 |
| MGT 440 | Healthcare Management I – Managing People Effectively | 3 |
| MGT 441 | Healthcare Management II – Managing Processes Effectively | 3 |
| MGT 450 | Population Health Management: Systems & Policies | 3 |
| PE 108 | Introduction to Nutrition | 3 |
| PE 265 | Advanced First Aid and Critical Care | 2 |
| PE 329 | Intro to Health Promotion | 3 |
| PE 461 | Exercise Physiology | 3 |
| PHIL 110** | Introduction to Logic | 3 |
| PSY 231 | Abnormal Behavior | 3 |
| PSY 313 | Physiological Psychology | 3 |
| PSY 350 | Ethics in Psychology | 3 |
| PSY 462 | Adult Development and Aging | 3 |
| PSY 465 | Psychopharmacology | 3 |
| SOC 462 | Sociology of Health and Illness | 3 |
| SPAN 103** | Spanish for Special Purposes (Medical) | 3 |
| SPCH 300 | Interpersonal and Rational Communications | 3 |
| SPCH 332** | Logic Argumentation and Reasoning | 3 |
| STAT 241 | Elementary Statistics | 3 |
| | | |

- ** These courses are recommended by Nebraska Methodist College (NMC) and will reduce credits needed in the NNC program.
- * One course in the arts, history, and human connections will be required by NMC's curriculum. Transfer eligible courses in these areas will reduce requirements while at NMC. Please see your advisor for recommendations.
- **C. General Studies:** Completion of the pre-respiratory therapy courses and a respiratory therapy clinical training program will lead to a Bachelor's Degree in Applied Health Sciences from UNK. Therefore, students must also complete the requirements for the LOPER General Studies Program at UNK not covered by the Required Courses.
- D. Professional Training in Respiratory Therapy: Students must complete a one-year professional clinical training at an affiliated Hospital/School of Respiratory Therapy. Students must register for HSCI 475: Internship in Health Sciences: Respiratory Therapy, worth 5 credit hours, every semester during the clinical training (fall and spring semesters) for a total of 10 credit hours. Students are awarded a total of 25 credit hours for the respiratory therapy training upon completion of the professional clinical program. The University of Nebraska is currently affiliated with the clinical program Nebraska Methodist College in Omaha. Students in the Nebraska Methodist College program may complete the professional training in Kearney at Good Samaritan Hospital. See footnote for additional details on attending a hospital-based program.

Option 2 - Master's Degree Program: Students may enter the profession by pursuing a master's degree program after **completion of a bachelor's degree** in any discipline at UNK. Students may receive a Master's Degree in Respiratory Care from the University of Nebraska Medical Center (UNMC) through a 21 month graduate program. This program offers more advanced training and a larger scope of practice for professionals. The following prerequisite courses are required for admission to the UNMC Master's Degree program:

Take all of the following:

| BIOL 211 | Human Microbiology | 4 |
|----------|---------------------------|---|
| BIOL 225 | Anatomy and Physiology | 4 |
| BIOL 226 | Anatomy and Physiology | 4 |
| BIOL 325 | Medical Terminology | 1 |
| CHEM 160 | General Chemistry | 4 |
| MATH 102 | College Algebra | 3 |
| PHYS 203 | Physics for Allied Health | 4 |
| | | |

Academic Guidelines

Not all respiratory therapy programs require a minimum GPA, however, students who are successful in gaining admission to a clinical training program typically have at least a 3.0 cumulative GPA. UNMC requires a minimum of 2.75 cumulative and prerequisite GPAs in order to be eligible to apply. Many programs require that each course be passed with a grade of "C" or better. UNMC requires a "C-"or higher in all required prerequisites.

Non-Academic Guidelines

There is no magic formula for acceptance into professional school. Admission is based on GPA, shadowing and medical experiences, community involvement and volunteerism, leadership qualities, the interview, the essay, and letters of recommendation. Shadowing and medical experiences are of utmost importance. Health Sciences offers opportunities to meet these non-academic guidelines through the Shadowing Program, the Health Science Club, and volunteer experiences. Students should plan to be involved in these types of activities and experiences throughout their undergraduate career. Other important non-academic factors include good moral character, interpersonal skills, a deep commitment to healthcare, evidence of leadership potential and service to others. *Preference is given to students with a strong understanding of the profession.* Therefore, shadowing is strongly recommended if possible. *UNMC Requires Conversation Times*: Three unique conversations with a respiratory therapist are required. UNMC requires the use of "Conversation Confirmation Forms," available on their website, to document the experiences.

The Application Process

The applications and application timelines for respiratory care training programs are available directly from each program via the program website.

Letters of Evaluation/Recommendation

Letters of evaluation will be required of applicants. Letters from a faculty member, respiratory therapist, academic advisor, or employer would be appropriate. Information about the non-academic character of a student would be most useful as academic information is already in the application.

Interviews

Most schools screen applicants with some form of personal interview. The format of the interview may vary depending on the schools to which the student is applying.

Criminal Background Checks

Prerequisite for enrollment into any health science professional program or clinical training is consent for an external background check. This check includes, but is not limited to, past criminal offenses and registry information. If there is evidence of arrest for a crime(s), conviction for a crime(s), presence on an abuse registry, or other information which reasonably suggests that patient safety might be compromised, the student will be asked to provide additional information.

Citizenship/International Students

Professional schools in the health sciences vary as to whether they accept non-U.S. citizens. Some schools that do accept non-citizens require a substantial financial commitment up front. Since not all schools accept non-citizens and since the financial commitment of those that do may be substantial, students should thoroughly research and carefully consider such a decision and discuss it with their pre-health advisors early in their undergraduate years.

Suggested Sequence of Key Courses for Bachelor's Degree Program

| | Fall | Spring |
|--------|---|---|
| Year 1 | CHEM 145, 148, or CHEM 160 (LOPER 8) MATH 102 (LOPER 4) SOC 100 ENG 101 | BIOL 211 ENG 102 (LOPER 2) SPCH 100 (LOPER 3) LOPER 1 LOPER 6 |
| | 13 hours | 16 hours |
| Year 2 | BIOL 225 BIOL 325 Respiratory Elective PSY 203 or 230 (LOPER 7) LOPER 9 | BIOL 226 Respiratory Elective LOPER 5 LOPER 10 |
| | 14 hours | 12 hours |
| Year 3 | Respiratory Electives 15 hours | PHYS 203 or PHYS 205 Upper Division Respiratory Electives (5 credits) Electives 13-14 hours |

Professional clinical training in affiliated respiratory therapy program.

Clinical training in affiliated respiratory therapy program.

Year 4

HSCI 475 – 5 credit hours

Students must register for this course at UNK during both semesters (Bachelor's program only).

HSCI 475 – 5 credit hours (Bachelor's program only)

Students should be aware of prerequisites for courses and plan accordingly. Please view course descriptions to find the prerequisites. Visit with your advisor if you have questions.

Notes On Attending a Hospital-Based Professional Respiratory Therapy Training Program

- Required Course: HSCI 475: If attending one of the affiliated hospital-based professional programs and planning to receive a degree from UNK, students are required to register each semester (fall and spring semester) for a five credit hour course titled "Internship in Health Sciences" (HSCI 475). This course is required in order to complete graduation requirements and allow students to receive financial aid from UNK if necessary. The course is a credit/no credit course and students are given credit each semester as long as they are passing their professional program. In order to graduate, students are required to register for the course 2 times fall and spring semesters of the professional training program. Students will be reminded each semester to register for HSCI 475. If all requirements are complete, students should apply for spring or summer graduation during their final year of the professional program to receive the Bachelor of Science in Applied Health Sciences Degree from UNK.
- **Cost of Attendance:** The cost of attending an affiliated respiratory therapy program varies by program and can range anywhere from approximately \$20,000 30,000 including the program's tuition, books, fees and uniforms. Housing costs are not included. The UNK tuition and fees for HSCI 475 have been waived.
- Mode of Delivery: A professional program in respiratory therapy includes both didactic coursework and hands-on training in a clinical setting. The didactic coursework will occur in a classroom setting, however, some of the content may be delivered electronically or via distance education. The hands-on training will occur in person in the clinical setting.