Respiratory Care Program

PROGRAM HANDBOOK
And
CLINICAL COMPETENCY PACKET
2013 - 2014

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Welcome!

Welcome and congratulations on your acceptance to the Respiratory Care program at North Shore Community College. We are pleased that you have chosen to pursue your education in this exciting and rewarding field.

This handbook is provided to assist you as you progress through the program. It contains program specific information that is vital to your educational experience and it supplements the information provided to you in the college’s course catalog. It is expected that you keep this handbook as a resource referring to it whenever necessary. All Respiratory Care students are required to adhere to the policies and procedures contained in this handbook.

The faculty looks forward to assisting you in attaining the career goals that you have established for yourself.

Sincerely,

Program Faculty
### Respiratory Care (RSP)

#### Basic Skills Core/Proficiency Requirements
Communications Proficiency and Mathematics Proficiency (Mathematics Modules 1-4, MAT013 or the equivalent) are two of the requirements for admission to this program and they are required for graduation from NSCC; further, completion of Mathematics Modules 1-8, MAT091 or the equivalent is also required for admission. For additional admissions requirements, see http://www.northshore.edu/academics/programs. Please consult the college website or an academic advisor for information about the course prerequisites for all of the courses in this program.

#### HONORS PROGRAM OPTION
Interested students may refer to the Honors Program website at www.northshore.edu/honors.

#### First Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>BIO103</td>
<td>Anatomy and Physiology 1</td>
<td>4</td>
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<tr>
<td>RSP126</td>
<td>Respiratory Care Pharmacology</td>
<td>3</td>
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</tr>
<tr>
<td>RSP101/102</td>
<td>Fundamentals of Respiratory Care 1 &amp; 2</td>
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<td>RSP111/112</td>
<td>Respiratory Care Clinical Experience 1 &amp; 2</td>
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<td>RSP131/132</td>
<td>Respiratory Care Lab 1 &amp; 2</td>
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<tr>
<td>BIO104</td>
<td>Anatomy &amp; Physiology 2</td>
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<td>CHE101</td>
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<td>RSP122</td>
<td>Physiology of Respiratory Care</td>
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**Total Semester Credits:** 14 17

#### Second Year

<table>
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<td>Composition 1</td>
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<td>RSP201/202</td>
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<td>RSP211/212</td>
<td>Respiratory Care Clinical Experience 3 &amp; 4</td>
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<td>RSP231/232</td>
<td>Respiratory Care Lab 3 &amp; 4</td>
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<td>BIO110</td>
<td>Introduction to Microbiology</td>
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<td>Respiratory Care Clinical Experience 5</td>
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<td>RSP215</td>
<td>Contemporary Topics in Respiratory Care</td>
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**Total Semester Credits:** 17 20

**Total Program Credits:** 68

#### Requirement Notes
1. The prerequisite for Anatomy and Physiology 1 can be met through ONE of the following with no time limit for when it was completed: BIO101 or BIO105 with a "C" or higher, or TEAS version V only Science section score of 50% or higher, or LPN Certificate, or a Bachelor of Science in biological science or chemistry. It can also be met with ONE of the following completed within the past 5 calendar years: high school biology with a "C" or higher, biology CLEP test with a score of 50 or higher, or AP biology test with a score of 3 or higher.
2. The prerequisites for RSP102 Fundamentals of Respiratory Care 2 are RSP101, RSP111, and RSP132, MAT091 with a "C" or better or its equivalent.
Course Learning and Credentialing Options

Distance Learning - some sections of the above courses may be available through a distance learning format. For information, please go to www.northshore.edu/distance.

Alternative Credentialing - Alternative options for earning course credit may exist and can be explored through the Center for Alternative Studies and Educational Testing. For information, please go to www.northshore.edu/cas.

Program Information

- Entrance into any Respiratory Care course requires a grade of "C" (75%) or better in all Respiratory Care prerequisite courses. For graduation from the Respiratory Care program a grade of "C" (75%) or better is required for all Respiratory Care (RSP) courses.

- Students are strongly urged to meet with their academic advisor on a semester basis or as needed to review the prerequisites of each course within the program and discuss course selections for successful completion of this program.

Admissions and Transfer Information

- Admission to this Program occurs only in the Fall semester.
- This is a Special Admissions Program - Admission to this program has specific entrance requirements and may be competitive; program may have limited seating capacity. Further information about the program, application process and admission requirements can be found at http://www.northshore.edu/academics/programs.
- This program may meet the eligibility criteria for MassTransfer and Joint Admissions with Massachusetts public colleges and universities (please see www.mass.edu/masstransfer), or, it may have a transfer agreement with a private 4-year college (please see www.northshore.edu/academics/departments). You may also visit NSCC’s Student Support and Advising Center on the Lynn or Danvers campus.

Additional Information

Please visit www.northshore.edu/academics/programs for more information about this Program of Study.
Position Statement

Definition of Respiratory Care

Respiratory Care is the health care discipline that specializes in the promotion of optimum cardiopulmonary function and health. Respiratory Therapists employ scientific principles to identify, treat and prevent acute or chronic dysfunction of the cardiopulmonary system. Knowledge and understanding of the scientific principles underlying cardiopulmonary physiology and pathophysiology, as well as biomedical engineering and technology, enable respiratory therapists to provide patient care services effectively.

As a health care profession, Respiratory Care is practiced under medical direction across the health care continuum. Critical thinking, patient/environment assessment skills, and evidence-based clinical practice guidelines enable respiratory therapists to develop and implement effective care plans, patient-driven protocols, disease-based clinical pathways, and disease management programs. A variety of venues serve as the practice site for this health care profession including, but not limited to:

- acute care hospitals
- sleep disorder centers and diagnostic laboratories
- long term acute care facilities
- rehabilitation, research and skilled nursing facilities
- patients’ homes
- patient transport systems
- physician offices
- convalescent and retirement centers
- educational institutions
- medical equipment companies and suppliers
- wellness centers

Effective 12/99
Revised 12/06
Revised 07/09
Respiratory Care Program Mission

The mission of the Respiratory Care Program is to provide affordable, high quality education, with an emphasis on career preparation and intellectual development in an environment that is welcoming and supportive. The program is dedicated to the development of appropriate cognitive, psychomotor, and affective competencies in the students such that they may apply scientific understanding, technological skills, and human values within their profession.

Program Goals

To provide individuals with career preparation associated with Entry-Level and Advanced Practitioner Respiratory Care competencies with consideration of the needs and expectations of the program's communities of interest.

To provide a curriculum that leads to the Associate in Science degree, eligibility for the national credentialing process, entry into the Massachusetts licensure process, and employment in Respiratory Care.
AARC Statement of Ethics and Professional Conduct

In the conduct of professional activities the Respiratory Therapist shall be bound by the following ethical and professional principles. Respiratory Therapists shall:

- Demonstrate behavior that reflects integrity, supports objectivity, and fosters trust in the profession and its professionals.
- Promote and practice evidence-based medicine.
- Seek continuing education opportunities to improve and maintain their professional competence and document their participation accurately.
- Perform only those procedures or functions in which they are individually competent and which are within their scope of accepted and responsible practice.
- Respect and protect the legal and personal rights of patients, including the right to privacy, informed consent, and refusal of treatment.
- Divulge no protected information regarding any patient or family unless disclosure is required for the responsible performance of duty as authorized by the patient and/or family, or required by law.
- Provide care without discrimination on any basis, with respect for the rights and dignity of all individuals.
- Promote disease prevention and wellness.
- Refuse to participate in illegal or unethical acts.
- Refuse to conceal, and will report, the illegal, unethical, fraudulent, or incompetent acts of others.
- Follow sound scientific procedures and ethical principles in research.
- Comply with state or federal laws which govern and relate to their practice.
- Avoid any form of conduct that is fraudulent or creates a conflict of interest, and shall follow the principles of ethical business behavior.
- Promote health care delivery through improvement of the access, efficacy, and cost of patient care.
- Encourage and promote appropriate stewardship of resources.
- Work to achieve and maintain respectful, functional, and beneficial relationships with all health professionals.

Effective 12/94
Revised 12/07
Revised 07/09
Revised 07/12
American Association for Respiratory Care
Position Statement
Cultural Diversity

The AARC professional community embraces diversity and multi-culturalism in all of its forms and promotes respect and cultural competence in every facet of its mission. The AARC is enriched by the unique differences found among its diverse members, their patients/clients, and other stakeholders. The AARC values and incorporates equal opportunity, and promotes the use of personal and cultural backgrounds to enhance our profession. The AARC accomplishes this by:

- Demonstrating sensitivity to all forms of diversity and multiculturalism including, but not limited to: age, gender and gender identity, race, color and ethnicity, nationality and national origin, ancestry, religious affiliation and creed, sexual orientation, socio-economic status, political affiliation, physical and mental abilities, veteran and active armed service status, job responsibilities and experience, education and training.

- Acknowledging the varied beliefs, attitudes, behaviors and customs of the people that constitute its communities of interest, thereby creating a diverse and multicultural professional environment.

- Promoting an appreciation for communication between, and understanding among, people with different beliefs and backgrounds.

- Accommodating the needs of the physically disabled at events and activities.

- Using multicultural content and gender-neutral references in documents and publications.

- Promoting diversity education and cultural competence in its professional education programs.

- Recruiting candidates from under-represented groups for leadership and mentoring programs.

Effective 12/94
Revised 12/07, 04/13
American Association of Respiratory Care

Respiratory Care Scope of Practice

Respiratory Therapists are health care professionals whose responsibilities include the diagnostic evaluation, management, education, rehabilitation and care of patients with deficiencies and abnormalities of the cardiopulmonary system. The scope of practice includes the application of technology and the use of treatment protocols across all care sites including, but not limited to, the hospital, clinic, physician’s office, rehabilitation facility, skilled nursing facility and the patient’s home.

The practice of respiratory care encompasses activities in diagnostic evaluation, therapy, and education of the patient, family and public. These activities are supported by education, research and administration. Diagnostic activities include but are not limited to:

- Obtaining and analyzing physiological specimens
- Interpreting physiological data
- Performing tests and studies of the cardiopulmonary system
- Performing neurophysiological studies
- Performing sleep disorder studies

Therapy includes but is not limited to the application and monitoring of:

- Medical gases and environmental control systems
- Mechanical ventilator support
- Artificial airway care
- Bronchopulmonary hygiene
- Pharmacological agents related to respiratory care procedures
- Cardiopulmonary rehabilitation
- Hemodynamic cardiovascular support

The focus of patient and family education activities is to promote knowledge and understanding of the disease process, medical therapy and self-help. Public education activities focus on the promotion of cardiopulmonary wellness.

Effective 8/87
Revised 12/07
Revised 12/10
American Association for Respiratory Care

Tobacco and Health

The American Association for Respiratory Care (AARC) is a professional organization dedicated to the protection of health through public education and the provision of the highest standards of respiratory care. By virtue of their education and health care experience, respiratory therapists are professionals who have a clear understanding of the nature of cardiopulmonary disease and are in a position to act as advocates for healthy hearts and lungs. The AARC is an advocate for both tobacco cessation and tobacco prevention programs.

The AARC recognizes its responsibility to the public by taking a strong position against cigarette smoking and the use of tobacco in any form, and the inhalation of any toxic substance. In view of the evidence, which confirms the health-threatening consequences of using these products in both active and passive forms, the AARC is committed to the elimination of smoking and the use of any tobacco products and the inhalation of any toxic substance.

The AARC acknowledges and supports the rights of non-smokers and pledges continuing sponsorship and support of initiatives, programs, and legislation to reduce and eliminate smoking. The AARC extends its concern beyond the smoking of tobacco to the use of smokeless tobacco. These products are linked to diseases of not only the heart and lungs, but also to the gastrointestinal tract, mouth, and nose. There is also evidence that these products, when applied to the mucous membranes, diffuse into the circulation and can also cause ill effects in remote organs of the body.

Effective: 1991
Revised: 07/11
Academic Policies

Each student will review a copy of the Program Handbook at the time of applying for admission to the program. Thereafter the student will receive a copy in the first week of classes in September. It is the responsibility of the student to be familiar with and abide by the policies contained in this handbook.

Attendance
All faculty members will maintain a record of attendance for each student for lecture, lab, and clinical attendance. All syllabi have specific written attendance policies.

1. A student absent from class, clinical or lab will be held responsible for any announcements and skills presented and for making arrangements to assure the acquisition of materials presented during class.
2. It is the student’s responsibility to make up all missed work – see course syllabi for appropriate schedule.
3. Students who will be late reporting to class or lab should notify the faculty member and leave a message.
4. Although the faculty recognize that occasional situations arise which affect a student’s ability to arrive on time, frequent tardiness is unacceptable and may result in adversely affecting the final grade. Please refer to the policy for clinical attendance and tardiness that differs from the policy described here for classroom courses.
5. Attendance in all classes and laboratory sessions is essential. The appropriateness of excused absences is determined by the individual faculty member and or the Program Director.
6. Students are expected to be present for all exams. Course syllabi contain specific information regarding absence on the day of an exam.

Professional Conduct
1. Each student is required to conduct himself/herself in a professional manner while in the education setting, i.e. classroom, clinical setting, discussion boards. The final grade may be affected by the student’s interpersonal skills.
2. Conduct that is unethical or unprofessional so as to affect or potentially affect another student or instructor’s well being in the academic or clinical environment may result in immediate suspension.
3. Students should be aware of the potential impact of information that is placed on social media web sites such as Facebook. Clinical affiliate personnel and potential employers will have access to this public information; this information may have an adverse impact on the student’s standing in the program or the student’s ability to obtain employment while in the program and post graduation.
4. Cell phones must be turned off and out of sight while in the classroom at the college. Under special circumstances, with permission from the instructor, the student may be permitted to have their phones visible on the desk.
5. In clinical, students will be permitted to use their cell phones on a limited basis and only during a break when away from patient care areas. Students will receive a written warning if the use of the cell phone is deemed inappropriate by the instructor. See policy at the end of this handbook.
6. Patient confidentiality must be maintained in all settings including postings on college discussion boards and during classroom presentations. The patient’s name and identifying information should not be disclosed in any prepared materials. Information discussed in an educational setting must not be shared with any parties.

Academic Progress
1. Students are required to maintain a 75% in all RSP. Failure of the lab, lecture, or clinical courses will result in an interruption in the sequence of courses. According to the policy of the Division of Health Professions, “The following students must apply for readmission prior to registration: students who have not been matriculated and enrolled at the College within the previous 5 years; students who have graduated from the College; and students in selective admission programs (Nurse Education, PTA, OTA,
Radiologic Technology, Respiratory Care, Medical Assisting Certificate, Veterinary Technology, Surgical Technician Certificate and Practical Nursing Certificate) who have interrupted their sequence of professional courses with a course withdrawal, course failure, and/or semester stop out. Students in health degree programs seeking readmission must meet current admission requirements and follow the specific policies and procedures defined by individual programs. Readmission to health professions programs is not automatically guaranteed even when a seat is available. If readmitted, students are permitted only one readmission to their program on a space available basis with approval by the Program Director.

Students who withdraw from the program for any reason or who fail an RSP course must complete an application for re-entry into the program. If space is not available in the program, the student may be placed on a wait list. The student must also submit a letter to the Program Director addressing the changes that have been made to enhance the academic success if readmitted to the program. Students may be required to complete other requirements before being re-admitted to the program. Examples would include repeating a clinical course that was completed or completing some science courses. If accepted, the student must have a current CPR certification, complete health record, liability insurance, and health insurance. Once a student is readmitted, if for any reason, that student is unable to finish the semester and has to withdraw, a subsequent re-admission will not be granted. The student would not be allowed to return to the program again.

When an interruption in the sequencing of clinical courses occurs, the student will be required to demonstrate competency in the last clinical course successfully completed. A written and practical hands-on test will be administered. In order to progress to the next clinical course the student must attain at least a 75% on the test that is administered.

2. Students failing a course at mid semester will receive a midterm warning consistent with the college’s policy. Students receiving a warning are expected to meet with the instructor to review the midterm average and discuss methods of improving it.

### Grading for Respiratory Care 75%

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<th>Maximum</th>
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<tr>
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<td>100</td>
</tr>
<tr>
<td>A-</td>
<td>90-92</td>
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<tr>
<td>B+</td>
<td>87-89</td>
<td>90-92</td>
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<tr>
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<tr>
<td>B-</td>
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<td>C+</td>
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<td>C</td>
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<td>C-</td>
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<td>D</td>
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<tr>
<td>F</td>
<td>60-62</td>
<td>Below 60</td>
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Programs that have an established passing grade of 75 or higher will use a different range for letter grading for C and C- compared to the number range used by the college.

### College’s ranges

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<tr>
<th>Letter</th>
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<tr>
<td>F</td>
<td>60-62</td>
<td>Below 60</td>
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### Length of Time to Complete the Program

According to the Commission on Accreditation for Respiratory Care, “once a student is admitted to an accredited program in Respiratory Care, every effort should be expended to having the student graduate with his/her cohort.
However, should circumstances dictate otherwise, the student must complete the program within two years following the graduation of his/her initial cohort/class. Should the student leave the program within the above time period and subsequently wishes to be readmitted, the student may reapply to the program if the institutional and program regulations permit. Reentry to the program should be on a space available basis and should only be allowed if the student can graduate within the above time frame (two years after graduation of his/her cohort). Should program regulations allow the student to request reentry into the program, an objective evaluation should be used to determine whether such placement of the student within the curriculum is appropriate.”

Transfer Students

Transfer students will be accepted into the second semester of the first year only. Transfer students will be required to demonstrate competency in the clinical component. A written and hands on practical test will be administered. The student must attain a 75% in order to go on to clinical. In some cases, it may be necessary for a transfer student to repeat a clinical course.

Academic Honesty

Members of the NSCC community are expected to act within the standards of academic honesty. Any dishonest behavior is subject to disciplinary action, which may range from that which the instructor imposes relative to the specific course to dismissal from the College, depending on the seriousness of the act.

Dishonest academic behavior includes but is not limited to:

Cheating – use of unauthorized notes during an exam, giving or receiving unauthorized assistance on an exam, copying from someone else’s exam, term paper, homework, or report, theft of exam materials, falsification of works or records.

Plagiarism – Using the words, data, or ideas of another as one’s own, without properly acknowledging their source. Students should consult the college’s Pipeline information for proper documentation procedures.

In addition to action taken relative to the specific course, the instructor may bring any matter related to academic dishonesty to the Dean of Health Professions for consideration if further action is warranted.

Limited Permit/Licensure

Matriculated Respiratory Care students may apply for a Limited Permit to work in the field after the first semester in the program, provided RSP 101, 111, and 131 have been successfully completed with a grade of “C” or higher. After each subsequent semester in the program, the student may request an updated “Verification of Education” form from the Program Director. To be eligible for an updated permit, the lab, lecture and clinical courses must be successfully completed. Students are not permitted to perform procedures/treatments while employed unless the item has been checked off as completed. It is the student’s responsibility to inform the hospital department when the updated form has been completed and stamped by the Board of Respiratory Care. All licensure forms and information can be downloaded and printed at www.mass.gov/dph/boards. There is an initial fee for a limited permit but no additional cost to update the permit after each semester in the program.

Students who take time off from Respiratory Care courses for any reason are no longer eligible to work in the field. Only matriculated students can work in the field on a limited permit. Students waiting to be accepted back to the program who have not yet been accepted are not considered matriculated and cannot work in the field. It is the student’s responsibility to inform the hospital if there is a change in the enrollment status.

After graduation, when the CRT exam is successfully completed, it is the graduate’s responsibility to apply for a full license. The National Board of Respiratory Care (NBRC) does not communicate credentialing exam results with the state licensing boards.
Professional Liability Insurance (Malpractice)
All students must show evidence of maintaining liability insurance before being allowed in any clinical education course. Students will be given all details including the cost of the insurance at the beginning of each academic year.

Campus Pipeline
Campus Pipeline provides a secured-access Web portal to students registered at NSCC. This portal offers centralized information about campus activities as well as access to web based NSCC services including email, course registrations, transcripts, financial aid, class schedules, calendars and more. Campus Pipeline can be accessed from any computer that has Internet access or a connection to the NSCC network. To access your Campus pipeline account, open the NSCC home page at www.Northshore.edu and click on the Pipeline logo.

All email communication to students from program faculty will occur through the student’s NSCC email. During the semester, it is the student’s responsibility to check their NSCC email address DAILY for communication from the faculty.

CORI Evaluations
Students interested in participating in an academic program that involves working with children, the disabled, or the elderly, or includes a clinical affiliation internship or field placement with a private or public health care provider will be required to undergo a Criminal Offender Record Information check and/or Sex Offender Record Information (SORI) check. Depending on the contents of the student’s CORI or SORI, participation in clinical, internship, or field placement may be denied. A CORI will also be performed on all students entering the second year in the program. Students who do not pass a second CORI will be required to leave the program even if the first year of the program has been completed successfully.

Also in order to practice respiratory care in the state of Massachusetts, individuals must obtain a license which according to law requires that individuals must: complete an accredited respiratory care program, apply to the Board of Respiratory Care, be of good moral character, pass a licensure examination and pay the appropriate fee before licensure may be obtained. Students should be aware that it is possible to pass the CORI background check that is done by the college for clinical placement but not be able to pass the background check that is performed for a state professional license. If a student is at all unsure of the potential outcome of a CORI background check, then he/she should contact the Board of Respiratory Care to determine the requirements.

Pipeline Degree Evaluation
In the third semester, before meeting with an advisor, the students should perform a degree evaluation through Pipeline. This should be done before registration for final semester courses to ensure that the student is aware of all of the graduation requirements that remain.

Directions for Degree Evaluation
You can access your transcript and perform a degree evaluation for yourself through Pipeline under the School Services tab. These tools are great and fairly simple to follow. The basic steps are to go to School Services, then to Student Services, then to Student Records, then to Degree Evaluation - follow the prompts/submit; when you get to "curriculum information" page click on "generate new evaluation" at the bottom; then click into the Program [Resp Care] and click "generate request"; then click in "detail requirements" and submit. This tool then identifies all program requirements you have met and not met (by applying your transcript to degree requirements for that specific program). Scroll through the entire document for a full report. The courses that you have not met will indicate 'NO' in red. The courses you have met will say "YES".
Application to Graduate

In order for a student to graduate, a graduation application form must be completed and submitted to the Enrollment and Student records department. Students must complete the form and submit it so that a review of the student’s transcript will be completed. A letter will then be sent to the student indicating what courses need to be completed in order to graduate. It is the student’s responsibility to review transcripts for transfer courses. Questions pertaining to transfer courses should be directed to the Enrollment and Student Records office.

Use of Calculators

The National Board of Respiratory Care (NBRC) does NOT permit the use of calculators during the credentialing examinations. Students will be permitted to use calculators during exams while in the program but are advised to use them only to check for accuracy after the problem is solved without the use of the calculator. Students will be tested from time to time in basic mathematical operations.

Health Status Changes/ Technical Standards

Students who are absent from clinical for an extended period of time due to illness or injury or who stop out of the program and return will be required to submit an updated technical standards form to the clinical coordinator or program director. A student who is unable to meet the technical standards will not be permitted to return to clinical. The technical standards for the program can be found in the next few pages.

Health Insurance

All students are required to carry health insurance while they are matriculated in the program.

Clinical Assignment/Schedule

Please keep in mind that clinical rotations can be held on either the day shift (6:30 or 6:45 AM to 3 PM) or an evening shift (2:00 PM to 10:00 PM) with the additional possibility of a weekend rotation in the upcoming year. Students who are assigned to the Wednesday evening clinical section, should not schedule a class on a Thursday. From time to time students may be required to attend on a Thursday instead of the Wednesday evening. In the second year of the program, the starting time may be as early as 6:00 AM depending on the clinical site. Clinical assignments will be determined by program faculty. Students may be assigned to a different clinical site from one semester to another to maintain a balanced number of students in each section.
TECHNICAL STANDARDS FOR RESPIRATORY CARE PROGRAM

General Job Description: Utilizes the application of scientific principles for the identification, prevention, remediation, research, and rehabilitation of acute or chronic cardiopulmonary dysfunction thereby producing optimum health and function. Reviews existing data, collects additional data, and recommends obtaining data to evaluate the respiratory status of patients, develop the respiratory care plan, and determine the appropriateness of the prescribed therapy. Initiates, conducts, and modifies prescribed therapeutic and diagnostic procedures such as: administering medical gases, humidification and aerosols, aerosol medications, postural drainage, bronchopulmonary hygiene, cardiopulmonary resuscitation; providing support services to mechanically ventilated patients; maintaining artificial and natural airways; performing pulmonary function testing, hemodynamic monitoring and other physiologic monitoring; collecting specimens of blood and other materials. Documents necessary information in the patient's medical record and on other forms, and communicates that information to members of the health care team. Obtains, assembles, calibrates, and checks necessary equipment. Uses problem solving to identify and correct malfunctions of respiratory care equipment. Demonstrates appropriate interpersonal skills to work productively with patients, families, staff, and co-workers. Accepts directives, maintains confidentiality, does not discriminate, and upholds the ethical standards of the profession.

<table>
<thead>
<tr>
<th>PHYSICAL STANDARDS</th>
<th>Freq</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIFT: up to 50 pounds to assist moving patients</td>
<td>F</td>
</tr>
<tr>
<td>STOOP: to adjust equipment</td>
<td>F</td>
</tr>
<tr>
<td>KNEEL: to perform CPR</td>
<td>O</td>
</tr>
<tr>
<td>CROUCH: to locate and plug in electrical equipment</td>
<td>F</td>
</tr>
<tr>
<td>REACH: 5½' above the floor to attach oxygen devices to wall outlet</td>
<td>C</td>
</tr>
<tr>
<td>HANDLE: small and large equipment for storing, retrieving, moving</td>
<td>C</td>
</tr>
<tr>
<td>GRASP: syringes, laryngoscope, endotracheal tubes</td>
<td>C</td>
</tr>
<tr>
<td>STAND: for prolonged periods of time (e.g., deliver therapy, check equipment)</td>
<td>C</td>
</tr>
<tr>
<td>FEEL: to palpate pulses, arteries for puncture, skin temperature</td>
<td>C</td>
</tr>
<tr>
<td>PUSH/PULL: large, wheeled equipment. e.g., mechanical ventilators</td>
<td>C</td>
</tr>
<tr>
<td>WALK: for extended periods of time to all areas of a hospital</td>
<td>C</td>
</tr>
<tr>
<td>MANIPULATE: knobs, dials associated with diagnostic/therapeutic devices</td>
<td>C</td>
</tr>
<tr>
<td>HEAR: verbal directions</td>
<td>C</td>
</tr>
</tbody>
</table>
### PHYSICAL STANDARDS

<table>
<thead>
<tr>
<th>Action</th>
<th>Freq*</th>
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<tbody>
<tr>
<td>HEAR: gas flow through equipment</td>
<td>C</td>
</tr>
<tr>
<td>Alarms</td>
<td>C</td>
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<tr>
<td>through a stethoscope such as breath or heart sounds</td>
<td>C</td>
</tr>
<tr>
<td>SEE: patient conditions such as skin color, work of breathing</td>
<td>C</td>
</tr>
<tr>
<td>mist flowing through tubing</td>
<td>F</td>
</tr>
<tr>
<td>shapes and forms associated with radiographs.</td>
<td>F</td>
</tr>
<tr>
<td>TALK: to communicate in comprehensible English goals/procedures to patients.</td>
<td>C</td>
</tr>
<tr>
<td>READ: typed, handwritten, computer information in English</td>
<td>C</td>
</tr>
<tr>
<td>WRITE: to communicate in English pertinent information (e.g., patient evaluation data, therapy outcomes)</td>
<td>C</td>
</tr>
</tbody>
</table>

### MENTAL/ATTITUDINAL STANDARDS

<table>
<thead>
<tr>
<th>Task</th>
<th>Freq*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Function safely, effectively, and calmly under stressful situations.</td>
<td>F</td>
</tr>
<tr>
<td>Maintain composure while managing multiple tasks simultaneously.</td>
<td>F</td>
</tr>
<tr>
<td>Prioritize multiple tasks.</td>
<td>C</td>
</tr>
<tr>
<td>Exhibit social skills necessary to interact effectively with patients, families, supervisors, and co-workers of the same or different cultures such as respect, politeness, tact, collaboration, teamwork, discretion.</td>
<td>C</td>
</tr>
<tr>
<td>Maintain personal hygiene consistent with close personal contact associated with patient care.</td>
<td>C</td>
</tr>
<tr>
<td>Display attitudes/actions consistent with the ethical standards of the profession.</td>
<td>C</td>
</tr>
</tbody>
</table>

*Performance Level: O = occasionally 50-74%; F = frequently 75-89%; C = constantly 90-100%

*Applicants who are offered admission must document their ability to perform all essential tasks with or without reasonable accommodation in order to begin the professional courses. If you are an otherwise qualified individual with a disability who seeks a reasonable accommodation, you need to contact the Office of Disability Services for eligibility determination for reasonable accommodation(s). For those applicants offered admission, you will be asked to self certify by signing the Technical Standards which are included in the Health Forms packet.
RATIONALE FOR COURSES:
The Clinical Experience courses are a series of four "hands-on" courses in the program. Also, Clinical Experience 5 provides an opportunity for students to gain proficiency in respiratory care procedures.

**RSP111 - Clinical Experience 1:**

provides an introduction to the profession of Respiratory Care, including how the Respiratory Care profession participates in the health care delivery system, so that the learners may understand their roles and responsibilities in patient/client care. The course content includes: training in emergency techniques, which the student may apply both in and out of the hospital (e.g. CPR); knowledge and skills in patient assessment, which provide crucial tools for the evaluation of the status of the patient before, during, and after therapeutic and diagnostic procedures, and training in the performance of specific therapeutic and diagnostic modalities that the learner will be responsible for in his/her role as a practicing Respiratory Care Practitioner.

(8 hours per week)

**RSP112 - Clinical Experience 2:**

is the second in the series of four "hands-on" courses in the program. It provides for the development of the knowledge, skills, and attitudes necessary for the role and responsibilities of a respiratory care practitioner in the areas of medical gas therapy, arterial blood gas (ABG) interpretation, humidification/aerosol therapy, and arterial blood gas sampling and analysis. The student continues to apply the techniques that were mastered in the previous courses while integrating the techniques that will be mastered during this course and the associated laboratory and lecture as he/she progresses toward "job-entry" level respiratory care.

(8 hours per week)

**RSP211 - Clinical Experience 3:**

is the third in the series of four "hands-on" courses in the program. It provides experience in the more advanced aspects of respiratory care such as arterial blood gas (ABG) interpretation, airway management, mechanical ventilation, non-invasive positive pressure ventilation (NPPV) and management of the ventilator patient. The learner must master the procedures that allow him/her to assume the responsibility for respiratory care techniques associated with the intensive care unit (ICU) and critically ill patients.

(16 hours per week)

**RSP212 - Clinical Experience 4:**

is the fourth in the series of four "hands-on" courses in the program. It provides for the experience to integrate all previous knowledge, skills, and attitudes into a total respiratory care process. In addition to continuation of mechanical ventilation and advanced patient assessment other rotations to be included are pulmonary function testing, home care, and observation in a neonatal ICU, airway management and pediatric rehabilitation. The student must master the procedures that will allow him/her to perform at entry level for all the current respiratory care procedures as well as to provide a solid foundation for advanced respiratory care procedures. In the final semester, students will prepare and present a comprehensive case study.

(16 hours per week)

**RSP214 - Clinical Experience 5:**

develops proficiency in Respiratory Care procedures through 160 clock hours of supervised respiratory care experience following completion of RSP112. Students who have a Massachusetts Limited Permit may secure a position in respiratory care, accumulate at least 160 clock hours, then convert that experience into college credit through the NSCC Center for Alternative Studies. Any student who does not anticipate accumulating the required number of hours by employment must inform the program that s/he is seeking an unpaid clinical rotation. It is the responsibility of the student to secure a paid or unpaid position and to meet the hospital requirements. The student must hold a Massachusetts Limited Permit for a paid or unpaid position. In the case of an unpaid position, a special agreement between the college, the student, and the agency must be completed. The student will notify the Clinical Coordinator when an agreement is required. Students cannot graduate until this requirement is completed.

(160 clock hours)
UNIT COMPETENCIES:

**RSP111 - Clinical Experience 1:**

(W, O) 1. Demonstrate competence in the introductory clinical objectives.
(P/F) 2. Discuss the Respiratory Care department with respect to organizational chart, job descriptions, patient services, diagnostic and therapeutic procedures performed, medical record documentation and billing procedures.
(W) 3. Perform and/or interpret the appropriate patient assessment procedures for a given patient.
(W*) 4. Administer, evaluate, and recommend the pharmacology regimen for a given patient.
(O or W) 5. Administer, evaluate, and recommend an appropriate chest physical therapy (CPT) program for a given patient.

**RSP112 - Clinical Experience 2:**

(O) 6. Administer, evaluate, and recommend the appropriate medical gas therapy for a given patient.
(W) 7. Interpret all aspects of arterial blood gas values and describe the treatment required to correct a patient's clinical situation based on the ABG values.
(W, O) 8. Perform arterial blood gas sampling and analysis.
(O) 9. Administer, evaluate, and recommend appropriate humidification and aerosol therapy for a given patient.

**RSP211 - Clinical Experience 3:**

(O, W) 10. Administer, evaluate, and recommend appropriate spontaneous positive pressure therapy for a given patient.
(W, *O) 11. Establish and maintain ventilation on a patient with a given mechanical ventilator. (Includes ICU Prep)
(O) 12. Perform, evaluate, and recommend appropriate airway management for a given patient.
(W) 13. Ventilatory support.

**RSP212 - Clinical Experience 4:**

(W) 14. Recognize the causes of ventilatory/respiratory failure and perform, evaluate, and recommend ventilator management for a given patient.
(W*) 15. Observe, discuss, perform, and interpret pulmonary function tests.
(W*) 16. Perform and/or interpret the appropriate patient assessment procedures for a given patient.
(W, O) 17. Prepare and present a case study on a patient with a respiratory condition.
(P/F) 18. Observe and discuss respiratory home care for a given patient with chronic lung disease as well as the respiratory care of the NICU and pediatric patient.

* These written evaluations are weighted as UNIT score (40%). Other written evaluations such as library assignments or periodic quizzes will be included in the semester's 20% written component.

An oral examination is optional at the instructor's discretion for Unit 16.
STANDARDS:

Students must maintain a consistent record of attendance so that the appropriate number of hours can be completed. Students who do not complete health record documentation in a timely fashion may be required to withdraw from clinical and the program.

The student must perform to a "PASSING" level for each objective of each unit; a 75% level for each unit, and a 75% level for each clinical experience course.

In order to receive a PASS, the student must consistently perform the objective according to the accepted procedure of the NSCC Respiratory Care Program and the clinical affiliate.

The student must be able to maintain and re-demonstrate, if necessary, passing performance on each objective for each competency throughout all clinical experience courses.

The student must complete all units in a timely manner (see EVALUATION #9) or risk suspension from clinical and/or the program.

EVALUATION:

1. Each of the objectives of each unit will be graded on a PASS/FAIL basis after observation by the evaluator.

2. Each objective with an asterisk (*) will be evaluated with the use of a Clinical Procedure Check-Off sheet.

3. The student must receive a "PASS" on an objective prior to performing that activity on a patient except under direct supervision. Students who experience consistent difficulty with clinical skills will be directed to the lab on the college campus for remediation. If the skill cannot be mastered and if clinical time is missed, the student may be required to withdraw from the course and possibly from the program.

4. Students are expected to demonstrate "PASSING" performance on objectives previously "PASSED" (i.e. from any previous clinical experience course). Unsafe performance will be handled appropriately, including possible termination from the clinical course and/or the program even when written test scores are passing.

5. The student will receive formal and/or informal feedback throughout the semester on his/her clinical performance on the "Weekly Clinical Self Evaluation Form" and/or the "Counseling/Advising Form".

6. The student will receive written interpersonal relations (IPR) evaluations as needed and at final semester (see APPENDIX A). An unsatisfactory IPR evaluation for a clinical course may result in a non-passing grade for that course regardless of the other evaluations. Additional IPR evaluations may be rendered as warranted.

7. The student will complete a weekly “Clinical Self Evaluation” and submit it to the Clinical Instructor. The clinical instructor will provide feedback to the student and will meet with the student when appropriate if performance is not satisfactory. Any item that is rated a 3 or lower is considered unsatisfactory.

8. A final score for each UNIT will be assigned at the end of the semester based upon the designated evaluation methods. If a failing grade (<75%) is earned on the first attempt at that UNIT exam, students may make additional attempts at that UNIT exam during the designated semester at the convenience of the Clinical Instructor. The final score for that UNIT will be the initial score obtained. If a passing score has not been achieved by the end of the semester for one (and only one) UNIT, the policy described in EVALUATION #9 will apply.
9. If only one UNIT in RSP111 and/or RSP112 is not completed during the designated semester, the student will be given an incomplete (I) for that UNIT, which must be completed by the end of the following semester.

If any UNIT in RSP211 and/or RSP212 is not completed during the designated semester, the student will receive a course grade of "IP" for that clinical experience course. {Note: IPs must be completed by 12 weeks into the following semester or they automatically change to a grade of "F" - see College catalog for full policy.}

10. The course grade will be determined based upon the following evaluations:

   - unit scores average (O, W*)........... 40%
   - final simulation exam .................. 40%
   - written quizzes (W) ..................... 20%
   - interpersonal relations ............... +/- 3 pts

11. Students who are returning to the program who have had an interruption in course sequencing will be expected to demonstrate clinical competency by successfully completing a written and practical exam based on the previous semester’s clinical competencies. Attendance in clinical will not be permitted until competence is demonstrated.

12. Students who are permitted to attend clinical who are not matriculated in the program will also be required to demonstrate competency of the previous semester’s check-offs.

13. Students who wish to audit a clinical course must complete all exams that are given throughout the semester.
**Unit One: INTRODUCTION**

**Competency:** DEMONSTRATE COMPETENCE IN THE INTRODUCTORY CLINICAL OBJECTIVES.

**Rationale:** The first 4-5 weeks of the Clinical Experience will be devoted to the presentation of a brief overview of the material of Clinical Experiences 1 and 2 so that the learner may rapidly achieve a threshold of information in order to provide perspective to future observation and practice.

**Pass Date | * * OBJECTIVES * * **

1. __________| 1. Perform cardiopulmonary resuscitation (CPR).
   ___ a. Begin training for BLS certification.
   ___ b. Identify equipment used in intubation.
   ___ c. Identify manual resuscitators used in the hospital.
   ___ d. Ventilate the intubation manikin with and without an endotracheal tube.
   ___ e. Assemble and troubleshoot manual resuscitators.

2. __________| 2. Discuss department organization.
   ___ a. List all therapeutic and diagnostic procedures performed by the department.
   ___ b. List the department personnel positions, a brief job description and identify the person presently occupying that position.
   ___ c. Identify all paperwork involved in department record keeping and billing.

3. __________| 3. Discuss the patient's records.
   ___ a. Identify the different sections of the medical chart.
   ___ b. Successfully complete 5 or more Medical Chart Surveys.

4. __________| 4. Demonstrate and discuss infection control.
   ___ a. Begin working the department wash room if available.
   ___ b. Discuss why infection control is so important in respiratory care.
   ___ c. List the different isolation techniques employed at the hospital.
   ___ d. Discuss the methods used in sterilization/disinfection of equipment.

5. __________| 5. Discuss various medications used in Respiratory Care.
   ___ a. ___________________________ ___ d. ___________________________
   ___ b. ___________________________ ___ e. ___________________________
   ___ c. ___________________________ ___ f. ___________________________
Unit One: INTRODUCTION (continued)

6. __________ | 6. Discuss, observe, and demonstrate CPT.
   __ a. Review the therapeutic components of airway clearance techniques (ACT) and Incentive
   Spirometry. ACT includes chest physical therapy with percussion/vibration, postural drainage,
   and positive expiratory pressure (PEP) devices.
   __ b. Review the goals and hazards of pulmonary hygiene and deep breathing exercises.
   __ c. Demonstrate proper pulmonary hygiene techniques on a mannequin or fellow student.
   __ d. Demonstrate the instructions involved in teaching coughing, diaphragmatic breathing, pursed lip
   breathing, and localized expansion.

7. __________ | 7. Discuss, observe, and demonstrate oxygen therapy.
   __ a. Assemble an oxygen set-up for patient use.
   __ b. Collect and fill out the appropriate paperwork for an oxygen set-up.
   __ c. Engage and disengage a flowmeter from the wall outlet.
   __ d. Prepare an E cylinder for patient use.
   __ e. Identify all equipment and paperwork needed for an oxygen set-up.
   __ f. Identify all oxygen devices used at the hospital and their approximate FIO2 delivered.
   __ g. Put all oxygen devices on a mannequin under simulated conditions.
   __ h. Review the goals and hazards of oxygen therapy.
   __ i. Discuss infection control techniques used in conjunction with oxygen therapy.

8. __________ | 8. Discuss, observe, and demonstrate aerosol therapy.
   __ a. Identify all equipment needed for a large volume nebulizer (LVN) set-up.
   __ b. Identify all aerosol devices used at the hospital.
   __ c. Review the goals and hazards of aerosol therapy.
   __ d. Assemble a heated and cool continuous aerosol set-up for patient use.
   __ e. Assemble a hand-held small volume nebulizer (SVN).
   __ f. Collect and fill out the appropriate paperwork for a LVN and SVN set up.
   __ g. Put all aerosol devices on a mannequin under simulated conditions.
   __ h. Discuss infection control techniques used in conjunction with aerosol therapy.
Unit Two: DEPARTMENT, HOSPITAL, AND PROFESSIONAL ORIENTATION

Competency: SET UP A HYPOTHETICAL RESPIRATORY CARE DEPARTMENTAL PLAN COMPLETE WITH ORGANIZATIONAL CHART, JOB DESCRIPTIONS, PATIENT SERVICES, DIAGNOSTIC TESTS PERFORMED, RECORDKEEPING AND BILLING PROCEDURES, AND EQUIPMENT CLEANING STERILIZATION PROCEDURES.

Rationale: At some time, all Respiratory Care Practitioners will work in a hospital based department. In order to perform job functions efficiently in such an environment, the learner must know and understand the workings of a modern respiratory care department.

Pass Date | * * OBJECTIVES * *

1. __________ | 1. List and discuss the components of a given procedure in the department procedure manual.

2. __________ | *2. If applicable, perform equipment rounds and define the recordkeeping and billing procedures.

3. __________ | 3. Discuss cleaning and sterilization techniques on given respiratory care equipment.
NORTH SHORE COMMUNITY COLLEGE  
Respiratory Care Program - Clinical Procedure Check-Off

**EQUIPMENT ROUNDS**

<table>
<thead>
<tr>
<th>PROCEDURE</th>
<th>PERFORMANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. REVIEWS PATIENT KARDEX</td>
<td>1.</td>
</tr>
<tr>
<td>2. GATHERS APPROPRIATE EQUIPMENT</td>
<td>2.</td>
</tr>
<tr>
<td>3. CHECKS EVERY ROOM</td>
<td>3.</td>
</tr>
<tr>
<td>4. RECORDS APPROPRIATE RESPIRATORY DEVICE TO APPROPRIATE PATIENT</td>
<td>4.</td>
</tr>
<tr>
<td>5. RECORDS APPROPRIATE LITER FLOW</td>
<td>5.</td>
</tr>
<tr>
<td>6. PERFORMS APPROPRIATE EQUIPMENT CHANGES</td>
<td>6.</td>
</tr>
<tr>
<td>7. RESOLVES DISCREPANCIES APPROPRIATEALLY</td>
<td>7.</td>
</tr>
<tr>
<td>8. CHECKS &quot;Code Cart&quot;</td>
<td>8.</td>
</tr>
<tr>
<td>9. CHECKS Cylinder Oxygen Level</td>
<td>9.</td>
</tr>
<tr>
<td>10. OTHER (specify)</td>
<td>10.</td>
</tr>
</tbody>
</table>

Procedure completed in a timely manner. □ yes □ no

Comments:

Evaluator's Signature __________________________ Date ________________

□ Pass    □ Fail

✓ = acceptable  X = unacceptable  O = omitted  N = not applicable
**Unit Three: PATIENT ASSESSMENT**

**Competency:** PERFORM A COMPREHENSIVE PATIENT ASSESSMENT FOR A GIVEN PATIENT AND DOCUMENT USING THE SOAP NOTE FORMAT.

**Rationale:** The Respiratory Care Practitioner must be able to perform, locate, and interpret patient assessment procedures in order to make appropriate therapeutic recommendations, to administer therapy in the most effective manner, to evaluate progress toward predetermined therapeutic goals, and to recognize adverse reactions to therapy.

**Pass Date | OBJECTIVES |**

*1. Given a medical chart, locate, obtain, and interpret (normal and abnormal) information pertinent to the case. Information including parts of physical exam, vital signs, lab values, breathing patterns, medical terminology.*

*2. Gather the pertinent Subjective information on a given patient.*

*3. Gather the pertinent Objective information on a given patient.*

*4. Utilize the Subjective and Objective information to interpret and develop the Assessment (analysis) on a given patient.*

*5. Incorporate the Subjective and Objective information along with the Assessment to formulate an appropriate Plan for a given patient.*

*6. Apply the seven decision making steps (Therapeutic Decision Making) to formulate a respiratory care treatment plan for a given patient.*
<table>
<thead>
<tr>
<th>Procedure</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. RSP ORDERS</td>
<td>1. __________</td>
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<td>2. VITAL SIGNS</td>
<td>2. __________</td>
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<td>BP</td>
<td>____________</td>
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<td>P</td>
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<td>RR</td>
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<td>____________</td>
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<tr>
<td>3. NURSES NOTES (clinical</td>
<td>3. __________</td>
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<tr>
<td>signs, complaints,</td>
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<td>ambulating, etc.)</td>
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<td>4. LAB REPORT</td>
<td>4. __________</td>
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<td>WBC</td>
<td>________</td>
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<td>pH</td>
<td>________</td>
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<td>HCO3</td>
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<td>SaO2</td>
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<td>PaO2</td>
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<td>5. SPUTUM REPORT</td>
<td>5. __________</td>
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MEDICAL CHART SURVEY (cont’d)

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Performance</th>
</tr>
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<tbody>
<tr>
<td>6. CXR</td>
<td>____________</td>
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<tr>
<td></td>
<td>____________</td>
</tr>
<tr>
<td>7. PAST Hx</td>
<td>____________</td>
</tr>
<tr>
<td>(pertinent to resp.)</td>
<td>____________</td>
</tr>
<tr>
<td>8. MD COMMENTS/RECOMMENDATIONS (Progress notes, consults)</td>
<td>____________</td>
</tr>
<tr>
<td>9. THERAPY NOTES</td>
<td>____________</td>
</tr>
<tr>
<td>10. STUDENT’S COMMENTS/IMPRESSIONS</td>
<td>____________</td>
</tr>
</tbody>
</table>

Procedure completed in a timely manner. ☐ yes ☐ no

Comments:

Evaluator's Signature ____________ Date ____________

☐ Pass      ☐ Fail

√ = acceptable   X = unacceptable   O = omitted   N = not applicable
NORTH SHORE COMMUNITY COLLEGE
RESPIRATORY CARE PROGRAM

MEDICAL NECESSITY EVALUATION AND DOCUMENTATION

Student Name ___________________________________________ Date ______

1. Patient Initials only _______ Age _____ Gender _____ Rm No ___

2. Primary Dx __________________________ 3. Pulmonary Dx ______________________

4. Respiratory Care Orders ______________________________________________________

5. Therapeutic Objective(s) ______________________________________________________

6. SUBJECTIVE INFORMATION (patient statements)

7. OBJECTIVE INFORMATION (physical exam and charted data)

8. ASSESSMENT (analysis of your collected data to determine the patient's current condition)

9. PLAN (recommendations - provide a brief rationale)

Evaluation completed in a timely manner. □ yes □ no

Comments:

Evaluator's Signature ______________________ Date

✓ = acceptable X = unacceptable O = omitted N = not applicable
THERAPEUTIC DECISION MAKING
(seven steps of decision-making process)

Student Name _______________________      Hosp ______________           Date__________________

Procedure ____________________________________________________________ Performance __________

1. RECOGNIZE PROBLEM(S)
   (a) knowledge of normal situation(s)
   (b) trigger of abnormal situation

2. DEFINE PROBLEM(S)
   (a) gather appropriate information (Subjective and Objective)
   (b) analyze and interpret information (e.g. pathophysiology)

3. SPECIFY PATIENT GOAL(S)/THERAPEUTIC OBJECTIVE(S)
   (a) return patient to normal -OR-
   (b) return patient to baseline, if chronic condition(s)

4. DEVELOP MODALITY ALTERNATIVES TO MEET GOAL(S)
   (a) match goal(s) of therapeutic modalities to goal(s)
specified in STEP #3 (See AARC Clinical Practice Guidelines)

5. SELECT MODALITIES
   (a) determine availability
   (b) evaluate benefit vs. risk (risks = time, cost, pain risk
      morbidity, risk of mortality)

6. IMPLEMENT DECISION(S)
   (a) follow hospital and department policies and procedures
      (may have Therapist Driven Protocols)
   (b) follow NSCC Respiratory Care Program check sheet(s)

7. EVALUATE PATIENT
   (a) gather appropriate information
   (b) evaluate for adverse reaction(s)
   (c) evaluate for change in patient status due to intervention
      (1) goal(s) accomplished
      (2) acceptable progress toward goal(s)
      (3) unacceptable, but some progress toward goal(s)
      (4) Modify therapy if applicable.
      (5) Suggest therapy to be discontinued, frequency changed, or maintained.

Evaluation completed in a timely manner. □ yes □ no

Evaluator's Signature               Date               □ Pass □ Fail

= acceptable     X = unacceptable     O = omitted      N = not applicable
**Unit Four: PHARMACOLOGY**

Competency: ADMINISTER, EVALUATE, AND RECOMMEND THE PHARMACOLOGY REGIMEN FOR A GIVEN PATIENT.

Pass Date | * * OBJECTIVES * *
--- | ---

1. **| 1. Administer the following medications in accordance with a given physician's order. 

<table>
<thead>
<tr>
<th>Medication</th>
<th>Medication</th>
</tr>
</thead>
<tbody>
<tr>
<td>beclomethasone (Vanceril)</td>
<td>fluticasone (Flovent)</td>
</tr>
<tr>
<td>budesonide (Pulmicort)</td>
<td>levalbuterol (Xopenex)</td>
</tr>
<tr>
<td>triamcinolone (Azmacort)</td>
<td>bitolterol</td>
</tr>
<tr>
<td>omalizumab (Xolair)</td>
<td>metaproterenol (Alupent)</td>
</tr>
<tr>
<td>salmeterol (Serevent)</td>
<td>Albuterol (Proventil)</td>
</tr>
<tr>
<td>aminophylline (Aminophylline)</td>
<td>racemic epinephrine (Vaponefrin)</td>
</tr>
<tr>
<td>theophylline (Theodur)</td>
<td>varenicline (Chantix)</td>
</tr>
<tr>
<td>Bland aerosols (hypertonic saline, normal saline, hypotonic)</td>
<td>nicotrol patch (Nicoderm CQ)</td>
</tr>
<tr>
<td>acetylcysteine (Mucomyst)</td>
<td>ipratropium (Atrovent)</td>
</tr>
<tr>
<td>xyllocaine (Lidocaine)</td>
<td>atropine</td>
</tr>
<tr>
<td>prednisone</td>
<td>tiotropium (Spiriva)</td>
</tr>
<tr>
<td>methylprednisolone (Solumedrol)</td>
<td>montelukast (Singular)</td>
</tr>
<tr>
<td>cromolyn sodium (Intal)</td>
<td>pentamidine (Nebupent)</td>
</tr>
<tr>
<td>tobramycin (Tobi)</td>
<td>ribavirin (Virazole)</td>
</tr>
<tr>
<td>fluticasone + salmeterol (Advair)</td>
<td>budesonide + formoterol (Symbicort)</td>
</tr>
<tr>
<td>ipratropium + albuterol (Duoneb or Combivent)</td>
<td>formoterol (Perforomist)</td>
</tr>
<tr>
<td>arformoterol (Brovana)</td>
<td></td>
</tr>
</tbody>
</table>

2. **| 2. Evaluate and recommend the pharmacology regimen for a given patient.
Unit Five: AIRWAY CLEARANCE THERAPY (ACT)

Competency: PERFORM, EVALUATE, AND RECOMMEND AN ACT PROGRAM FOR A GIVEN PATIENT.

Rationale: The practitioner uses ACT on patients with various pulmonary diseases, pre- and post-operative patients, and those that have difficulty mobilizing secretions.

Pass Date | * * OBJECTIVES * *

1. __________| *1 Perform the following pulmonary hygiene techniques:
   - postural drainage _____
   - vibrations _____
   - percussion _____
   - oscillatory PEP (Flutter, Acapella)____
   - mechanical percussor _____
   - HFCWO _______

2. __________| 2. Perform the following deep breathing exercises:
   - diaphragmatic breathing _____
   - coughing techniques _____
   - pursed lip breathing _____
   - localized expansion _____
   - relaxation techniques _____

3. __________| *3. Perform ACT on a given patient.

4. __________| *4. Evaluate and recommend the appropriate ACT technique for a given patient.

5. __________| *5. Administer incentive spirometry/sustained maximal inspiration (SMI) in accordance with a given physician's order.

6. __________| *6. Evaluate and recommend the incentive spirometry therapy program for a given program.
Airway Clearance Therapy (ACT)

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CHECK ORDERS (frequency, DBE or pulmonary hygiene, IS)</td>
<td>1. ________</td>
</tr>
<tr>
<td>2. PRE-THERAPY EVALUATION (medical record, patient)</td>
<td>2. ________</td>
</tr>
<tr>
<td>3. EXPLAIN TO PATIENT (purpose, goals)</td>
<td>3. ________</td>
</tr>
<tr>
<td>4. PATIENT EVALUATION (level of coherence, cooperation, physical assessment)</td>
<td>4. ________</td>
</tr>
<tr>
<td>5. PERFORM APPROPRIATE ACT TECHNIQUE (postural drainage, vibrations, percussion, diaphragmatic breathing, coughing, pursed lip breathing, SMI)</td>
<td>5. ________</td>
</tr>
<tr>
<td>6. MONITOR PATIENT (observation, general appearance, toleration WOB, auscultation, VS)</td>
<td>6. ________</td>
</tr>
<tr>
<td>7. POST-TREATMENT EVALUATION (observation, general appearance, toleration, auscultation, cough, vs, results)</td>
<td>7. ________</td>
</tr>
<tr>
<td>8. COMPLETE PAPERWORK (T.O., rm, unit, Dx, pulmonary Dx, time, CXR, ABG, Rx description)</td>
<td>8. ________</td>
</tr>
<tr>
<td>9. DOCUMENT (date, time, signature, procedure, length of time given, toleration, cough, sputum)</td>
<td>9. ________</td>
</tr>
<tr>
<td>10. BEDSIDE MANNER</td>
<td>10________</td>
</tr>
</tbody>
</table>

Comments:

Evaluation completed in a timely manner. □ yes □ no

Evaluator’s Signature  Date  □ pass  □ fail

= acceptable  x= unacceptable  o = omitted  n = not applicable
Unit Six: MEDICAL GAS THERAPY

Competency: ADMINISTER, EVALUATE, AND RECOMMEND THE APPROPRIATE OXYGEN THERAPY FOR A GIVEN PATIENT.

Rationale: Oxygen is a drug commonly administered to patients for emergency life support, pulmonary disability, and postoperative states, who have developed pulmonary complications. Administration of oxygen and other medical gases is one of the duties of the Respiratory Care Practitioner, therefore, a thorough understanding of the goals, indications, contraindications, and hazards is necessary.

Pass Date | * * OBJECTIVES * *

1. __________ 1. Locate oxygen zone valves in your affiliate hospital and demonstrate the role of the Respiratory Care Practitioner in a mock fire drill.

2. __________ 2. Administer oxygen therapy using various devices in accordance with a given physician's order.

3. __________ 3. Discuss the goals of oxygen therapy.

4. __________ 4. Demonstrate the use of an oxygen analyzer.

5. __________ 5. Demonstrate the proper use of a pulse oximeter

6. __________ 6. Evaluate and recommend the oxygen therapy, high flow therapy or heliox device for a given patient.
NORTH SHORE COMMUNITY COLLEGE
Respiratory Care Program - Clinical Procedure Check-Off

OXYGEN THERAPY

Student Name _____________________ Hosp __________ Date __________

Device________________________

Procedure

1. CHECK ORDERS (device, liter flow.)

2. PRE-THERAPY EVALUATION (chart, patient)

3. COLLECT EQUIPMENT (flowmeter, humidifier, water, device)

4. EXPLAIN TO PATIENT (purpose, rules for use, no smoking)

5. SET-UP AND ADJUST EQUIPMENT (connect to source, attach device, adjust liter flow)

6. CHECK FUNCTION OF EQUIPMENT (liter flow, pres relief valve)

7. ATTACH TO PATIENT

8. MONITOR PATIENT (observation, how tolerated)

9. ASSESS AND TITRATE according to the order or therapy protocol.

10. COMPLETE PAPERWORK (kardex card, liter flow tag, name tag, equipment change tag)

11. BEDSIDE MANNER

Comments:

Evaluation completed in a timely manner. □ yes □ no

Evaluator’s Signature Date

= acceptable x = unacceptable o = omitted n = not applicable
NORTH SHORE COMMUNITY COLLEGE
Respiratory Care Program - Clinical Procedure Check-Off

OXYGEN ANALYZERS

Device_________________

Student Name ___________________________  Hosp ______________  Date___________________

Procedure ____________________________________________  Performance

1. COLLECT EQUIPMENT (analyzer, adaptor[s], sensor)  1. _____________
2. PERFORM PRE-USE CALIBRATIONS AND ADJUSTMENTS (check battery, inspect electrode, calibrate: to 0, to 21%, to 100%)  2 ______________
3. SAMPLE AND ANALYZE GAS  3 ______________
   Specify type of sample:

4. SET ALARMS if applicable. (+/- 5 to 10%)  4 ______________

Comments:

Evaluation completed in a timely manner.  ☐ yes  ☐ no

Evaluator’s Signature  Date  ☐ pass  ☐ fail

= acceptable  x= unacceptable  o = omitted  n = not applicable
# REST/EXERCISE OXIMETRY

NORTH SHORE COMMUNITY COLLEGE  
Respiratory Care Program - Clinical Procedure Check-Off

Student Name ________________________    Hosp______________            Date______________________

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. OBTAIN PHYSICIAN'S ORDER</td>
<td>1. __________</td>
</tr>
<tr>
<td>2. EXPLAIN PROCEDURE/PURPOSE TO PATIENT and assess ability to ambulate safely</td>
<td>2. __________</td>
</tr>
<tr>
<td>3. GATHER NECESSARY EQUIPMENT (oximeter, portable O2 system, watch)</td>
<td>3. __________</td>
</tr>
<tr>
<td>4. CHECK FUNCTION OF EQUIPMENT (calibration, O2)</td>
<td>4. __________</td>
</tr>
<tr>
<td>5. GATHER BASELINE READINGS AT REST (pulse, SpO2) titrate oxygen as needed to maintain SpO2 at 90% or higher or as ordered.</td>
<td>5. __________</td>
</tr>
<tr>
<td>6. AMBULATE PATIENT AS TOLERATED (level ground)</td>
<td>6. __________</td>
</tr>
<tr>
<td>7. GATHER READINGS DURING EXERCISE (peak pulse, SpO2 subjective dyspnea level)</td>
<td>7. __________</td>
</tr>
<tr>
<td>8. GATHER READINGS AFTER EXERCISE (pulse, SpO2, distance walked, recovery time)</td>
<td>8. __________</td>
</tr>
<tr>
<td>9. DOCUMENT INFORMATION</td>
<td>9. __________</td>
</tr>
<tr>
<td>10. BEDSIDE MANNER</td>
<td>10. __________</td>
</tr>
</tbody>
</table>

Comments:

Evaluation completed in a timely manner.  □ yes  □ no

Evaluator’s Signature  Date

= acceptable   x= unacceptable  o = omitted  n = not applicable
Unit Seven: ARTERIAL BLOOD GAS INTERPRETATION

Competency: INTERPRET ALL ASPECTS OF ARTERIAL BLOOD GAS VALUES AND DESCRIBE THE TREATMENT REQUIRED TO CORRECT A PATIENT’S CLINICAL SITUATION BASED ON THE VALUES.

Rationale: Arterial blood gases (ABGs) are an important tool in the assessment of respiratory patients. It is of critical importance that the Respiratory Care Practitioner become adept in the interpretation of these lab values. However, this expertise must go beyond simple interpretation. The therapist must also be able to describe the appropriate therapy to correct a clinical problem based on the blood gas values if he/she is to play a vital role in the care of these patients.

Pass Date | * * OBJECTIVES *

1. __________| 1. Interpret arterial blood gases on given patients according to: pH, PaCO2, HCO3, PaO2, AaDO2, SaO2.

2. __________| 2. Correlate the arterial blood gas values on a given patient to their clinical status.

3. __________| 3. Describe the treatment required to correct a given patient’s clinical problem based on the arterial blood gas values.

4. __________| 4. Integrate and discuss a series of arterial blood gas values with respect to the total clinical course of a given patient.
Unit Eight: ARTERIAL BLOOD GAS (ABG) SAMPLING AND ANALYSIS

Competency: PERFORM ARTERIAL BLOOD GAS SAMPLING AND ANALYSIS

Rationale: It is the responsibility of the respiratory care practitioner to sample and/or analyze arterial blood gases. Therefore, knowledge of the appropriate procedure, adverse reactions, and troubleshooting of equipment enhances patient safety and reliable information on which to base important clinical decisions.

Pass Date        * * OBJECTIVES * *

1.________| 1.  Demonstrate competency in a simulated ABG procedure.

2.________| *2.  Successfully perform a radial arterial puncture in accordance with a given physician's order.

3.________| 3.  Successfully obtain a blood sample from an arterial line if available.

4.________| *4.  Analyze a given arterial blood gas sample.

5.________| 5.  Be familiar with quality control procedures on a given blood gas machine.

~ - 40 - ~
ABG SAMPLING

Student Name _______________________            Hosp ______________               Date______________

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CHECK ORDERS (procedure, time, FIO2)</td>
<td>1.</td>
</tr>
<tr>
<td>2. PRE-THERAPY EVALUATION (anticoagulants, lab tests)</td>
<td>2.</td>
</tr>
<tr>
<td>3. COLLECT AND PREPARE EQUIPMENT (syringe, alcohol prep pad, gloves, resheathing device, cap, needles, heparin, gauze, ice, heparinized syringe)</td>
<td>3.</td>
</tr>
<tr>
<td>4. IDENTIFY PATIENT, EXPLAIN PROCEDURE PURPOSE</td>
<td>4.</td>
</tr>
<tr>
<td>5. PRE-PUNCTURE EVALUATION (palpate, select site, Allen’s Test)</td>
<td>5.</td>
</tr>
<tr>
<td>6. PREPARE SITE</td>
<td>6.</td>
</tr>
<tr>
<td>7. OBTAIN SAMPLE</td>
<td>7.</td>
</tr>
<tr>
<td>8. POST-PUNCTURE SITE CARE (apply pressure for minimum 5 minutes)</td>
<td>8.</td>
</tr>
<tr>
<td>9. POST-PUNCTURE SITE EVALUATION (observe for bleeding, hematoma, check distal pulse)</td>
<td>9.</td>
</tr>
<tr>
<td>10. PREANALYTICAL SAMPLE HANDLING (eliminate air, apply cap, mix, place in ice, label sample with patient ID)</td>
<td>10.</td>
</tr>
<tr>
<td>11. COMPLETE PROCEDURE</td>
<td>11.</td>
</tr>
<tr>
<td>12. DOCUMENT PROCEDURE</td>
<td>12.</td>
</tr>
<tr>
<td>14. FOLLOW-UP if necessary</td>
<td>14.</td>
</tr>
<tr>
<td>15. BEDSIDE MANNER</td>
<td>15.</td>
</tr>
</tbody>
</table>

Comments:

Evaluation completed in a timely manner.  □ yes     □ no

____________________________________                      □ pass  □ fail
Evaluator’s Signature   Date

= acceptable   x= unacceptable   o = omitted   n = not applicable

~ - 41 - ~
Unit Nine: HUMIDIFICATION/AEROSOL THERAPY

Competency: ADMINISTER, EVALUATE, AND RECOMMEND THE APPROPRIATE HUMIDIFICATION/AEROSOL THERAPY FOR A GIVEN PATIENT.

Rationale: Humidification/aerosol therapy are a frequent and integral part of the management of many patients with varied diseases and conditions. There are a vast number of types and brands of devices that are used in conjunction with oxygen therapy, bronchial hygiene, mechanical ventilation, and home care. The student must be competent in both the equipment and the application of humidification/aerosol therapy.

Pass Date | * * OBJECTIVES * *

1.________| *1. Administer aerosol therapy in accordance with a given physician's order.

   USN ______ spacers ______

   Large volume nebulizer _____ MDI _____

   DPI _____ Small volume nebulizer _____

   Other(s)_________________________

2._______| *2. Evaluate and recommend the aerosol therapy program for a given patient.

3. ________ 3. Administer humidity therapy in accordance with the order.

   Bubble humidifier ______ Wick humidifier ______

   Passover humidifier ______ HME ______

4. ________ 4. Evaluate and recommend humidity therapy for a given patient.

5. ________ 5. Discuss goals, indications, and hazards for aerosol and humidity therapy.
**NORTH SHORE COMMUNITY COLLEGE**  
Respiratory Care Program - Clinical Procedure Check-Off

**HUMIDIFICATION/AEROSOL THERAPY**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CHECK ORDERS (device, frequency, duration, medication, FIO2)</td>
<td>1. _____________</td>
</tr>
<tr>
<td>2. PRE-THERAPY EVALUATION (medical record, patient)</td>
<td>2. _____________</td>
</tr>
<tr>
<td>3. COLLECT EQUIPMENT (device, tubing, gas source, patient connection: mask, face tent)</td>
<td>3. _____________</td>
</tr>
<tr>
<td>4. IDENTIFY AND EXPLAIN TO PATIENT (purpose)</td>
<td>4. _____________</td>
</tr>
<tr>
<td>5. SET UP AND ADJUST EQUIPMENT (connect device, adjust FIO2, liter flow)</td>
<td>5. _____________</td>
</tr>
<tr>
<td>6. CHECK FUNCTION OF EQUIPMENT (mist, FIO2, pres relief valve)</td>
<td>6. _____________</td>
</tr>
<tr>
<td>7. ATTACH TO PATIENT</td>
<td>7. _____________</td>
</tr>
<tr>
<td>8. MONITOR PATIENT (observation, general appearance, how tol WOB, auscultation, HR, RR)</td>
<td>8. _____________</td>
</tr>
<tr>
<td>9. MODIFY THERAPY (if necessary)</td>
<td>9. _____________</td>
</tr>
<tr>
<td>10. POST-TREATMENT EVALUATION (observation, general appearance how tol, auscultation, HR, RR, cough, results)</td>
<td>10. _____________</td>
</tr>
<tr>
<td>11. COMPLETE PAPERWORK (Tx card, Kardex card)</td>
<td>11. _____________</td>
</tr>
<tr>
<td>12. CHART (date, time, Tx, medication, results, how tol, sig)</td>
<td>12 _____________</td>
</tr>
<tr>
<td>13. BEDSIDE MANNER</td>
<td>13. _____________</td>
</tr>
</tbody>
</table>

Comments:

Evaluation completed in a timely manner. □ yes □ no

Evaluator’s Signature  Date

✓ = acceptable  x = unacceptable  o = omitted  n = not applicable
Unit Ten: NONINVASIVE POSITIVE PRESSURE VENTILATION (NPPV) (Bilevel, CPAP)

Competency: ADMINISTER, EVALUATE, AND RECOMMEND APPROPRIATE NPPV THERAPY ON A GIVEN PATIENT.

Rationale: The Respiratory Therapist frequently administers NPPV to patients who are having ventilation and/or oxygenation difficulties in a variety of settings.

Pass Date | * * OBJECTIVES * *

1.________| 1. Perform patient evaluation to determine the need for NPPV. (Bilevel or CPAP).

2.________| *2. Administer NPPV in accordance with a given order.

3.________| 3. Recommend setting changes to improve the blood gas values and the patient’s clinical condition.

4.________| *4. Evaluate the clinical course of a patient receiving NPPV.
NORTH SHORE COMMUNITY COLLEGE  
Respiratory Care Program - Clinical Procedure Check-Off

NONINVASIVE POSITIVE PRESSURE VENTILATION (NPPV)

Device (Bilevel, CPAP) ____________

Student Name ________________________       Hosp ______________           Date____________________

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CHECK ORDERS (device, frequency, duration, FIO2, pressure)</td>
<td>1. __________</td>
</tr>
<tr>
<td>2. PRE-THERAPY EVALUATION (chart, patient)</td>
<td>2. __________</td>
</tr>
<tr>
<td>3. COLLECT EQUIPMENT (device, tubing, mask)</td>
<td>3. __________</td>
</tr>
<tr>
<td>4. EXPLAIN TO PATIENT (purpose)</td>
<td>4. __________</td>
</tr>
<tr>
<td>5. SET-UP AND ADJUST EQUIPMENT (connect device, settings for pressure, inspiratory time or rise time, FIO2, proper mask fit, set alarms)</td>
<td>5. __________</td>
</tr>
<tr>
<td>6. CHECK FUNCTION OF EQUIPMENT</td>
<td>6. __________</td>
</tr>
<tr>
<td>7. ATTACH TO PATIENT</td>
<td>7. __________</td>
</tr>
<tr>
<td>8. MONITOR PATIENT (observation, general appearance, how tol, WOB, auscultation, HR, RR, SPO2, ABG results)</td>
<td>8. __________</td>
</tr>
<tr>
<td>9. ADJUST EQUIPMENT/SETTINGS (if necessary)</td>
<td>9. __________</td>
</tr>
<tr>
<td>10. DOCUMENT implementation of NPPV.</td>
<td>10. __________</td>
</tr>
<tr>
<td>11. COMPLETE PAPERWORK if required.</td>
<td>11. __________</td>
</tr>
<tr>
<td>12. BEDSIDE MANNER</td>
<td>12. __________</td>
</tr>
</tbody>
</table>

Comments:

Evaluation completed in a timely manner □ yes □ no

Evaluator’s Signature       Date

\[ √ = \text{acceptable} \quad \times = \text{unacceptable} \quad ○ = \text{omitted} \quad n = \text{not applicable} \]

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## Unit Eleven: AIRWAY MANAGEMENT

**Competency:** PERFORM, EVALUATE, AND RECOMMEND APPROPRIATE AIRWAY MANAGEMENT FOR A GIVEN PATIENT.

**Rationale:** A patent airway is necessary for human life and it will be the responsibility of the Respiratory Care Practitioner to maintain and care for that airway. Students are likely to encounter artificial airways for relief of airway obstruction, facilitation of bronchial hygiene, and prolonged artificial ventilation.

Therefore, it is necessary that the student become adept in all aspects of airway management.

**Pass Date | * * OBJECTIVES * * **

1.________| 1. Demonstrate competency in the management of artificial airways by completing the following:
   - oropharyngeal _____ tracheostomy tube _____
   - nasopharyngeal _____ fenestrated tracheostomy tube _____
   - oral endotracheal _____ trach button _____
   - naso endotrachreal _____ Passy-Muir _____
   - laryngeal mask airway _____
   - other(s)________________________

2.________| 2. Demonstrate competency in assisting with an intubation.

3._______| 3. Demonstrate competency in endotracheal extubation.

4._______| *4. Perform suctioning techniques on an intubated patient.

5._______| *5. Perform suctioning techniques on a non-intubated patient.

6._______| *6. Evaluate and recommend airway management of a given patient.
NASOTRACHEAL SUCTIONING

Student Name _______________________        Hosp _______       Date______________________

Procedure                                                      Performance

1. CHECK ORDERS
2. COLLECT EQUIPMENT (complete suction set-up, O2 equipment)
3. ASSEMBLE EQUIPMENT (maintain sterility, pres = -80 to -120)
4. PRE-OXYGENATE PATIENT (2-4 minutes)
5. EXPLAIN TO PATIENT (purpose)
6. MAKE FIRST PASS WITH CATHETER (no suction in, proper depth, rotate catheter, intermittent suction moving out slowly)
7. MONITOR PATIENT (general appearance, EKG)
8. REPEAT OXYGENATION AND SUCTION PASSES AS NECESSARY
9. ASSESS SPUTUM (color, amount, consistency)
10. INSTILLATION TECHNIQUES (NS, acetylcysteine, coordinate w/ pt)
11. OVERALL INFECTION CONTROL TECHNIQUE
12. POST-PROCEDURE CARE OF EQUIPMENT (proper disposal, shut off O2 & suction, re-connect patient, cover manual resuscitator and connect tubing)
13. DOCUMENT (pt tol, sputum assessment, date, time, signature)
14. BEDSIDE MANNER

Comments:

Evaluation completed in a timely manner. □ yes  □ no

Evaluator’s Signature  Date

√= acceptable    x= unacceptable    o = omitted    n = not applicable
Unit Twelve: VENTILATORY SUPPORT

Competency: ESTABLISH AND MAINTAIN VENTILATION ON A PATIENT WITH A GIVEN VENTILATOR.

Rationale: The Respiratory Care Practitioner must be proficient in all aspects of mechanical ventilators (e.g. controls, alarms, tubing circuits, and troubleshooting) in order to effectively, efficiently, and safely carry out prescribed ventilator therapy.

Pass Date | * * OBJECTIVES * *

1.__________ 1. Identify and describe the function of each of the ventilator controls and prepare a given ventilator for patient use.

<table>
<thead>
<tr>
<th>VENTILATOR BRAND</th>
<th>ASSIST/CNTRL</th>
<th>SIMV</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPB 840</td>
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<tr>
<td>Servo i</td>
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<tr>
<td>Servo 300/900 B/C</td>
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<tr>
<td>Hamilton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTV 1200</td>
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</tbody>
</table>

2.__________ 2. Perform a ventilator check procedure and routine ventilator maintenance procedures.

3.__________ 3. Troubleshoot and correct a given malfunction in a given ventilator.
**Unit Thirteen:** MANAGEMENT OF THE PATIENT ON VENTILATORY SUPPORT

**Competency:** RECOGNIZE THE CAUSES OF VENTILATORY/RESPIRATORY FAILURE AND PERFORM, EVALUATE, AND RECOMMEND VENTILATOR MANAGEMENT FOR A GIVEN PATIENT.

**Rationale:** Determining the proper ventilator settings for a given patient is a frequent task of the Respiratory Care Practitioner, which requires a familiarity of the patient's entire clinical status. Once the patient's condition is stabilized, the Respiratory Care Practitioner must use the appropriate weaning procedures to allow the patient to breathe and function according to his/her baseline daily life.

**Pass Date | OBJECTIVES**

1. Establish initial mechanical ventilation on a given patient in accordance with a physician's order and/or department standard operating procedure/protocol.

2. Recommend the ventilator changes to correct the clinical condition of a given patient.

3. Evaluate the parameters that are used to monitor all modes of mechanical ventilation on a given patient.

   - vital signs
   - auscultation
   - CXR
   - ABG's
   - I & O
   - CVP
   - body weight
   - wave forms
   - Swan-Ganz measurements
   - PAP
   - dynamic compliance
   - static compliance
   - PCWP
   - sputum
   - PIP

4. Administer adjunct ventilatory techniques such as CPAP, PEEP, pressure support ventilation (PSV).

5. Evaluate the entire clinical course of a mechanical ventilator patient.
## INITIATING VENTILATOR CARE

**Device:** ________________

### Procedure

<table>
<thead>
<tr>
<th></th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CHECK ORDERS (device, parameters, mode)</td>
<td>1. ___________</td>
</tr>
<tr>
<td>2. SET-UP AND ADJUST EQUIPMENT (connect gas source, connect power, prepare humidifier set parameters: TV, RR, V, FIO2, SV, SR, sensitivity, pres limits, alarms)</td>
<td>2. ___________</td>
</tr>
<tr>
<td>3. PERFORM PRE-USE PERFORMANCE CHECK.</td>
<td>3. ___________</td>
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<tr>
<td>4. EXPLAIN TO PATIENT</td>
<td>4. ___________</td>
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<tr>
<td>5. ATTACH TO PATIENT</td>
<td>5. ___________</td>
</tr>
<tr>
<td>6. MONITOR PATIENT (observation, how tol, auscultation)</td>
<td>6. ___________</td>
</tr>
<tr>
<td>7. ADJUST VENTILATOR (if necessary)</td>
<td>7. ___________</td>
</tr>
<tr>
<td>8. COMPLETE PAPERWORK IF REQUIRED (vent card, vent sheet, ABG card)</td>
<td>8. ___________</td>
</tr>
<tr>
<td>9. DOCUMENT APPROPRIATELY</td>
<td>9. ___________</td>
</tr>
<tr>
<td>10. BEDSIDE MANNER</td>
<td>10. ___________</td>
</tr>
</tbody>
</table>

### Comments:

Evaluation completed in a timely manner. □ yes □ no

Evaluator’s Signature Date □ pass □ fail

\( √ = \) acceptable \( x = \) unacceptable \( o = \) omitted \( n = \) not applicable
NORTH SHORE COMMUNITY COLLEGE
Respiratory Care Program - Clinical Procedure Check-Off

VENTILATOR PATIENT ASSESSMENT

Student Name ________________________ Hosp ______________ Date ________________

Pt Name ___________________ MD __________ Rm No _______ Vent Mode ______________

CXR:

Comments:

SPUTUM REPORT:

Comments:

LAB REPORT:  Na _____ Cl _____ WBC _____ Creat _____
            K _____ Gluc _____ Hb _____ BUN _____

Comments:

HEMODYNAMIC:  P _____ BP _____ RR _____ T _____
               PA Dias _____ PCWP _____ QT _____ Qs/Qt _____
               C(a-v)O2 _____ I _____ O _____

Comments:
VENTILATOR PATIENT ASSESSMENT (cont)

Student Name________________________  Patient Name________________________

VENT REPORT:
VT_____  f_____  FiO2_____  VD_____  
FLOW_____  COMPL_____  VC_____  SPON VT_____  
SPON RR_____  IF_____  VE_____  

Comments:

AUSCULTATION:

ABG REPORTS:

pH_____  PaCO2_____  PaO2_____  HCO3_____  SaO2_____  
pH_____  PaCO2_____  PaO2_____  HCO3_____  SaO2_____  
pH_____  PaCO2_____  PaO2_____  HCO3_____  SaO2_____  
AaDO2_____  CaO2_____  

Meds:

MD REPORT AND PLAN:

COMMENTS:

Evaluation completed in a timely manner.  □ yes  □ no
______________________________________________  □ pass  □ fail
Evaluator’s Signature  Date

✓ = acceptable  x = unacceptable  o = omitted  n = not applicable
Unit Fourteen: PULMONARY FUNCTION TESTING

Competency: OBSERVE, DISCUSS, PERFORM, AND INTERPRET PULMONARY FUNCTION TESTS

Rationale: Pulmonary function tests provide valuable information to assist in the diagnosis, evaluation, and management of many patients. Both simple and sophisticated tests may be performed at the bedside or in the pulmonary function laboratory. The respiratory therapist must be able to understand and integrate the pulmonary function assessment data into the total clinical picture of the patient.

Pass Date | * * OBJECTIVES * *

1.________| 1. Confirm the correct selection of a nomogram for a given patient that would determine the pulmonary function test values for their age, sex, height, and weight.

2.________| 2. Demonstrate the use of volume displacement or pneumotachometers, and verbalize the patient testing procedure.

3.________| 3. Perform the following tests and determinations on a given patient: VC, FVC, FEV1, FEV3, MVV, FEV1%, FEF25-75%, and FEF200-1200.

4.________| 4. Calculate volumes and capacities and flows from spirometer tracings or readouts, and compute the percent predicted values.

5.________| 5. Discuss the servicing of the spirometer/ pneumotachometers with respect to sterilizing, changing tubing, and calibrating.

6.________| 6. Observe helium dilution testing, body box plethysmography, or nitrogen washout test for determination of FRC/TGV.

7.________| 7. Verbalize the concept of helium equilibration for volume measurement.

8.________| 8. Verbalize the concept of diffusion testing.

9.________| 9. Discuss and perform flow-volume loops.

10. ________| 10. Discuss the role of pulmonary function tests and their values in the management and evaluation of patients.

11. ________| 11. Interpret PFT values in accordance with standard procedure.

12. ________| 12. Discuss bronchoprovocation testing.
**Unit Fifteen: PEDIATRIC/NEONATAL RESPIRATORY CARE**

**Competency:** PERFORM, EVALUATE, AND RECOMMEND RESPIRATORY CARE ON A PEDIATRIC/NEONATAL PATIENT.

**Rationale:** Pediatric/neonatal emergencies and routine therapy are increasingly the responsibility of the respiratory care practitioner. In addition to major medical centers, community hospitals are managing more neonatal/pediatric cases. The knowledge and expertise of these procedures is necessary for all respiratory care practitioners in order to give safe and effective treatment.

**Pass Date | * * OBJECTIVES * * **

| 1.________| 1. Establish environmental therapy on a given patient in accordance with a physician's order. |
| 2.________| 2. Administer pediatric respiratory medications to a given patient in accordance with a physician's order. |
| 3.________| *3. Administer chest physiotherapy to a pediatric patient in accordance with a physician's order. |
| 4.________| 4. Administer aerosol therapy to a pediatric patient in accordance with a given physician's order. |
| 5.________| 5. Participate in physician rounds. |
| 7.________| 7. Set-up and troubleshoot a pediatric/neonatal ventilator. |
| 8.________| 8. Perform a pediatric/neonatal ventilator safety check. |
| 9.________| 9. Analyze the delivered FIO2 on a pediatric/neonatal patient. |
| 11.________| 11. Perform and interpret oximetry. |
| 12.________| 12. Interpret ABG's on a given pediatric/neonatal patient. |
| 13.________| *13. Evaluate and recommend a respiratory care program for a given pediatric/neonatal patient. |
**Unit Sixteen:**  
**PATIENT ASSESSMENT 2**

**Competency:**  
PERFORM AND/OR INTERPRET THE APPROPRIATE PATIENT ASSESSMENT DATA/PROCEDURES FOR A GIVEN PATIENT.

**Rationale:**  
The respiratory care practitioner must be able to perform, locate, and interpret patient data and procedures in order to make appropriate therapeutic recommendations, to administer therapy in a most effective manner, to evaluate progress toward pre-determined therapeutic objectives, and to recognize adverse reactions to therapy.

**Pass Date | OBJECTIVES**
--- | ---
   - ABG's
   - PFT's
   - thoracentesis
   - bronchoscopy
   - biopsy
   -
   - CBC
   - Hct
   - Hb
   - WBC
   - RBC
   - EOS
   - sputum
   - C & S
   - AFB
   - cytology
   -
   - CXR
   - bronchography
   - MRI
   - V/Q scan
   - CT scan
   - PET scan
   -
   - ventricular tachycardia
   - ventricular fibrillation
   - atrial arrhythmias
   - PVCs
   - nodal rhythms
   - others
   -
Unit Seventeen: CASE STUDY

Competency: PREPARE AND PRESENT A 30-MINUTE ORAL AND A WRITTEN CASE STUDY DEMONSTRATING UNDERSTANDING OF A RESPIRATORY RELATED CONDITION MANAGED WITH A MECHANICAL VENTILATOR.

Rationale: The respiratory care practitioner is frequently called upon to explain a procedure to a patient, a patient's family, and/or hospital staff; to give an inservice talk, and/or to recommend therapy to physicians. This assignment is to familiarize the student with the aspects of organizing, preparing, and presenting the clinical course of a mechanical ventilation patient as well as to study the disease state and how it is managed both in its classical presentation and in the particular case.

Grade: Case studies will be presented in the lab, but will be graded as a clinical unit and will count as part of the grade for Clinical Experience 4.

CASE STUDY OUTLINE

The case study should be organized into three parts: the classical manifestation of the disease; the patient's manifestation of the disease, and the comparison of the two manifestations.

I. Classical Manifestations
   A. Etiology and pathology
   B. Clinical manifestations
   C. Radiology and laboratory findings
   D. Treatment

II. Primary Disease (patient)
   A. Pathogenesis (etiology) and pathology
   B. Clinical manifestations
   C. Radiography and laboratory findings
   D. Treatment

III. Case Presentation (Compare the patient's case to the classical)
   A. Admission history and work-up
   B. Clinical course
      1. pre-mechanical ventilation
      2. during mechanical ventilation
         a. drugs and their actions
         b. laboratory work
         c. rationale for treatments
   C. Short-term goals
   D. Long-term goals
   E. Conclusions
Respiratory Care Program

Interpersonal Relations Evaluation

Name___________________________________ mid-term final CE 1 2 3 4 20___

APPEARANCE
A. always dressed appropriately with appropriate personal appearance, competency packet, and stethoscope, and no inappropriate paraphernalia (e.g. jewelry, smoking items).
B. chronic inappropriate dress, inappropriate personal appearance, and inappropriate paraphernalia prevalent.
C. usually dressed appropriately with appropriate personal appearance, competency packet, and stethoscope. No inappropriate paraphernalia in patient's presence.
D. always sets an outstanding example with dress, personal appearance, and paraphernalia.
E. usually dressed appropriately, but inappropriate paraphernalia in patient's presence.

Comments:

ATTENDANCE
A. frequent absences with or without appropriate excuses or occasionally absent without appropriate excuse.
B. rarely absent, has appropriate excuse when absent.
C. chronic absences with poor or no excuse.
D. perfect attendance
E. absent occasionally with reasonable excuse.

Comments:

PROMPTNESS
A. seldom tardy, but does have appropriate excuse.
B. always on time.
C. chronic tardiness with poor or no excuse.
D. tardy occasionally with reasonable excuse.
E. frequently tardy with or without appropriate excuse or occasionally tardy without appropriate excuse.

Comments:
Interpersonal Relations Evaluation (continued)

PREPARATION

A. usually prepared, may take slightly additional time or effort, but can rectify the situation without adversely affecting performance or outcome.
B. always prepared for all activities.
C. never prepared for activities and forgetful of necessary items.
D. almost always prepared. Unpreparedness does not need rectifying in order to accomplish task to required standards.
E. frequently unprepared. Rectifying situation requires additional time or effort which adversely affects the performance or outcome of tasks.

Comments:

INITIATIVE

A. always demonstrates exceptional initiative. Completes work, assists others, or finds other productive activities for spare time. Utilizes time to the fullest.
B. generally lacks initiative, procrastinates, frequently cannot complete assigned tasks. Requires frequent direction and supervision. Poor use of free time.
C. always completes work comfortably and frequently ahead of time. Has no difficulty finding additional appropriate activities.
D. occasionally lacks initiative. Can complete work, but fails to seek out other activities during spare time. Needs occasional direction.
E. satisfactory initiative. Completes work comfortably and generally seeks out additional activities.

Comments:

PRODUCTIVITY

A. above average productivity. Can usually complete tasks ahead of time.
B. chronically poor productivity. Very unorganized or requires exceptionally large amounts of time to carry out tasks.
C. excellent productivity, highly organized, almost always finishes tasks ahead of time, usually assists others after completion of own tasks.
D. below average productivity, generally needs additional time to complete assignments.
E. acceptable productivity, takes acceptable amounts of time to complete assigns tasks.

Comments:
Interpersonal Relations Evaluation (continued)

COMMUNICATION SKILLS

A. reports accurately and concisely most of the time. Can follow verbal instructions, but may require occasional clarification. Gives clear explanations most of the time. May occasionally use non-verbal signs inappropriately.

B. always reports accurately with occasional extraneous information. Understands intent of verbal instructions and follows them. Explanations are clear almost all of the time. Rarely uses inappropriate non-verbal signs.

C. frequently gives inaccurate information. Includes extraneous information that sometimes confuses the message. Able to understand and follow verbal instructions only after several explanations. Often uses inappropriate non-verbal signs.

D. usually gives inaccurate information. Gives much extraneous information that often confuses the message. Rarely able to follow verbal instructions. Explanations are usually unclear. Often uses very inappropriate non-verbal signs.

E. always reports accurately and very concisely. Readily able to understand and clarify intent of verbal instructions and follow them. Gives excellent explanations. Always uses appropriate non-verbal signs.

Comments:

COOPERATION

A. usually functions cooperatively with instructors/students/other members of health care team. Effective at negotiating crucial differences with others.

B. always functions cooperatively with instructors/students/other members of health care team. Highly effective at negotiating all differences with others.

C. occasionally uncooperative with instructors/students/other members of health care team at first, but able to cooperate after explanations. At times can be effective at negotiating differences with others.

D. usually uncooperative with instructors/students/other members of health care team. Always wants it his/her way. Unable/unwilling to negotiate differences with others.

E. Almost always functions cooperatively with instructors/students/other members of health care team. Able to negotiate most differences with others.

Comments:
Interpersonal Relations Evaluation (continued)

CHANGE
A. can usually improve by self-evaluation, may be advised occasionally, readily accepts and incorporates comments.
B. does not change poor habits or inappropriate behavior after repeated suggestions.
C. able to discover better ways to do things and initiates appropriate change within scope of training without being told.
D. changes poor habits reluctantly after being spoken to several times.
E. appropriately modifies behavior after weaknesses are pointed out.

Comments:

GENERAL ATTITUDE
A. just "putting in the time".
B. almost always demonstrates genuine interest in learning.
C. usually treats the course as "necessary", occasionally shows genuine interest in learning.
D. always enthusiastic and interested in pursuing learning. Frequently able to motivate and stimulate interest in others.
E. always demonstrates genuine interest in learning. Frequently demonstrates enthusiasm in learning.

Comments:

KNOWLEDGE
A. lacks significant knowledge, but seeks assistance appropriately.
B. lacks significant knowledge, fails to seek assistance appropriately.
C. has all necessary knowledge to perform within scope of practice, rarely seeks assistance.
D. has appropriate knowledge, seeks assistance appropriately.
E. has most necessary knowledge, seeks assistance appropriately.

Comments:

Student's Signature  Date  Evaluator’s Signature  Date
North Shore Community College  
Respiratory Care Program

Counseling/Advising Form

This form serves as documentation of a counseling/advising meeting with ___________________________ held on _________________.

Student name
Date

If applicable, his/her performance/status in the course _________ may not be consistent with successful completion of this component of the program.

Counseling/Advising issues discussed:

The student was advised to seek assistance from:

☐ Clinical Coordinator  ☐ Program Director
☐ Student Support Center  ☐ Counseling Center
☐ Clinical Instructor  ☐ Other____________________

Instructor ________________________  Date:___________________

I have read the above regarding my performance status in the Respiratory Care Program.

Student  ________________________ Date:___________________
NORTH SHORE COMMUNITY COLLEGE
Respiratory Care Program

Clinical Experience Unit Exam Summary

Student Name ___________________________________________  CE  1  2  3  4

Unit _____: _____________________________________________

Instructor's Comments:

FINAL SCORE _________

I have seen and discussed this evaluation: □ No comments □ Comments below

Student Comments: (indicate if an additional sheet has been used) □ Yes □ No

Evaluator's Signature ___________________________ □ Pass □ Fail

_ = acceptable     X = unacceptable     O = omitted     N = not applicable

~ - 62 - ~
RESPIRATORY CARE PROGRAM
WEEKLY CLINICAL SELF EVALUATION

Student ______________________ Date: ______________________

Hospital ______________________ CE 1 2 3 4 (circle one)

Directions: This weekly self-evaluation is to be completed by the student and given to the clinical instructor at the end of each clinical day for first year students and at the end of the clinical day on Wednesday for second year students.

Rating Scale:
- 5= Strongly agree, performance is always above average
- 4= Agree, performance is satisfactory most of the time
- 3= Neutral, performance is progressing but still needs improvement
- 2= Disagree, performance not progressing in a timely fashion and is below standards
- 1= Strongly disagree, performance is well below standards

_Students who consistently score at a 3 or below may be in jeopardy of failing a clinical course even when test scores are passing._

<table>
<thead>
<tr>
<th>Areas</th>
<th>Self-Evaluation</th>
<th>Instructor Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Appearance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Professional Appearance (Uniform, stethoscope, jewelry, hygiene)</td>
<td></td>
<td></td>
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<tr>
<td>2. Attendance</td>
<td></td>
<td></td>
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<tr>
<td>• Attendance, reports to clinical on time</td>
<td></td>
<td></td>
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<tr>
<td>• Follows procedure for notification for absence or tardiness</td>
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<td></td>
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<tr>
<td>3. Preparation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Prepared for all activities</td>
<td></td>
<td></td>
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<tr>
<td>• Applies theory to clinical application</td>
<td></td>
<td></td>
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<tr>
<td>• Has necessary items to perform therapy</td>
<td></td>
<td></td>
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<tr>
<td>4. Initiative</td>
<td></td>
<td></td>
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<tr>
<td>• Completes work comfortably</td>
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<tr>
<td>• Seeks out additional activities during spare time</td>
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<td></td>
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<tr>
<td>• Is self-directed</td>
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<tr>
<td>5. Productivity</td>
<td></td>
<td></td>
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<tr>
<td>• Can complete tasks in appropriate amount of time</td>
<td></td>
<td></td>
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<tr>
<td>6. Communication Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Give report accurately and concisely</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Communicate clearly with staff and patients</td>
<td></td>
<td></td>
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<tr>
<td>7. Cooperation</td>
<td></td>
<td></td>
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<tr>
<td>• Functions cooperatively with staff, classmates and patients</td>
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<td></td>
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<tr>
<td>• Can effectively negotiate differences with others</td>
<td></td>
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<tr>
<td>8. Change</td>
<td></td>
<td></td>
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<tr>
<td>• Can improve by self-evaluation</td>
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<td></td>
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<tr>
<td>• Readily accepts constructive criticism</td>
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<td></td>
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<tr>
<td>• Incorporates suggestions from instruction into practice</td>
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</tr>
</tbody>
</table>
### 9. General Attitude
- Is enthusiastic and interested in learning
- Seeks out clinical experiences to enhance learning

### 10. Knowledge
- Has appropriate knowledge to perform within scope of practice
- Can perform therapy with appropriate level of supervision

---

**Additional Comments**

---

**Physician Interaction - Please describe briefly and include name of physician and topic.**

---

**Student Signature**

**Date:**

**Instructor Signature**

**Date:**
Respiratory Care Program

Clinical Progress Report

Student Name ______________________________
Hospital __________________

Unit____: ____________________________________ Final Score ________

Unit____: ____________________________________ Final Score ________

Unit____: ____________________________________ Final Score ________

Unit____: ____________________________________ Final Score ________

Unit____: ____________________________________ Final Score ________

Unit____: ____________________________________ Final Score ________

Unit____: ____________________________________ Final Score ________

Unit____: ____________________________________ Final Score ________

COMPETENCIES SCORES AVERAGE (40%) ________

FINAL SIMULATION EXAM SCORE (40%) ________

WRITTEN QUIZ-EXAM AVERAGE (20%) ________

FINAL AVERAGE ________

TOTAL CLINICAL HOURS ________ FINAL GRADE ________

COMMENTS:

Instructor's Signature ______________________________ Date________________________

Copies of this report should be forwarded to the Clinical Instructors, Clinical Coordinator, and Program Director.
RESPIRATORY CARE PROGRAM

Clinical Attendance Policy

1. The student must complete the required number of clinical hours as evidenced by the Clinical Progress Report.

2. If the student is unable to report to the hospital at the required time, then he/she must notify the clinical instructor BEFORE the start of the clinical day. If the student is unable to contact the instructor, the student should call the Respiratory Care department and leave a message if that option is available. The clinical coordinator should also be notified in the event that the student, after making a reasonable effort, is unable to notify the instructor.

3. Students will be allowed one absence from clinical per semester. The following will apply for absences from clinical in excess of one day.
   A. Absence #2 – A make-up day in the Simulation lab will be required. This will be scheduled at the convenience of the Clinical Coordinator at the end of the semester. A written assignment will also be required in addition to the day in the lab. A grade of at least a 75% on the written assignment must be attained for this requirement to be met.
   B. Students who are absent more than 2 days per semester will have 5 points deducted per day from their final course grade. For example, a student with a final clinical course average of 80% but having 4 absences will end up with a final course grade of 70%. This would result in the student failing the course and not being able to progress in the program.

4. Upon the FIRST UNEXCUSED* absence from a clinical session, the student will be immediately suspended from the Clinical Experience. A suspension from clinical will result in a 5 point deduction from the final course grade in addition to any other point deductions that may apply. Suspended students will not be eligible to receive any IPR points.

5. Repeated tardiness (more than 2 times) is sufficient cause for suspension from Clinical Experience. A verbal warning will occur upon the first instance of tardiness. On the second occurrence a written warning will occur and any further occurrences during the semester will result in dismissal from clinical. Absences in excess of 2 days will result in a point deduction of 3 points per day.

6. Following suspension, the student may continue the Clinical Experience only after reaffirming his/her commitment in the Respiratory Care Program to the satisfaction of the Program Director, Clinical Coordinator and the appropriate Clinical Instructor.

7. Some clinical sites may begin the shift earlier or later than 7:00 am. The student will be required to adhere to the policies and procedures of the department.

* An "UNEXCUSED ABSENCE" occurs when a student misses a significant portion of the clinical day:
   1) without prior approval of the Clinical Instructor
      - OR -
   2) without personally notifying the Clinical Instructor before the start of the shift on the day of the absence
RESPIRATORY CARE PROGRAM

Dress Code

The required dress code for all students for Clinical Experience will consist of a short white lab jacket, navy blue scrub outfit, white sneakers or nursing shoes, identification badge, stethoscope, and watch with a second hand. Only navy blue shirts may be worn under a scrub top. The company that is used by students in the program to purchase the uniform is McGill's Inc., Manchester, N.H. (603) 627-3472.

Additionally, due to safety concerns, earrings on parts of the body, other than the earlobe, that are within view or grasp of a patient are not allowed to be worn during clinical hours. An appropriate selection of earring to be worn in the earlobe is a stud type only. Students will not be permitted to wear artificial fingernails or extenders. Natural nails must be clean and should be no longer than 1/4 inch long. No visible facial jewelry i.e. body piercing is allowed (tongue, nose, chin). In some clinical sites, body tattoos may need to be covered and not visible during clinical hours.

With regards to the identification badge, Massachusetts General Law Chapter 112, section 23 V allows the practice of respiratory care by "any person pursuing a supervised course of study leading to a degree or certificate in respiratory care as part of an accredited and approved educational program, if the person is so designated by a title which clearly indicates his status as a student .An employment identification badge does NOT satisfy this statutory requirement.

Students are not allowed to view/use cell phones while in a patient care area. Inappropriate use of cell phones will result in a written warning and possible suspension. In the event that an urgent issue or an emergency arises, the instructor should be informed and arrangements will be made.

Due to the close professional relationship that Respiratory Therapists have with patients, upon which the success of the therapy often depends, smoking paraphernalia, gum, candy, or other personal items should not be brought to the patient care area. Students are required to refrain totally from smoking while in clinical because some noxious odors such as cigarette smoke that may linger on clothing or heavy perfumes/colognes can be a trigger that may put some patients into acute bronchospasm and respiratory distress. Hair color and styling must be conservative (i.e. not blue, green unnatural red etc). Extreme hairstyles and colors are inappropriate.

All participants in Clinical Experience are required to bring a stethoscope, a watch with a second hand, and the competency packet to each clinical day. Students will be sent home and not permitted to participate in the clinical experience if any portion of the clinical uniform is missing. This absence from the clinical experience will have an impact on the student's standing in the course and the program.
RESPIRATORY CARE PROGRAM

Communication Policy

Students who wish to discuss an issue of academic or professional concern should adhere to the following procedure:

1. The student should **first** have a discussion with the instructor who is responsible for the course in which there is a concern. Most circumstances that arise can and should be addressed with the instructor directly involved. Rarely will situations occur that need any more than a calm, open, and professional discussion between the student and his/her instructor.

2. However, if the student does not believe that the issue has been resolved in a reasonable and satisfactory way, the student may discuss it with the faculty member who supervises the instructor. The supervisor will attempt to gather all necessary information from all available sources in order to determine the appropriate resolution.

   If another faculty member is contacted before any discussion with the instructor, then the student will be immediately referred back to the instructor for the appropriate discussion/resolution.
RESPIRATORY CARE PROGRAM
Professional Conduct Policy

The student must demonstrate appropriate conduct becoming a Health Care Professional. Professional conduct includes but is not limited to:

1. Adhering to the dress code of the program.

1. Behaving courteously towards patients, faculty, hospital staff, and peers.

2. Adhering to the attendance policy of the program.

3. Performing procedures, administering therapy, and completing assigned work in accordance with established policies and procedures in a timely manner.

5. Demonstrating the ability to work independently and utilizing free clinical time effectively.

6. Displaying appropriate bedside manner including identifying self and status, stating instructions clearly and concisely with appropriate pronunciation, using a friendly and pleasant tone of voice. [Be aware that some patients are hard of hearing and you may need to adjust your voice level in order to be heard. Do not assume that all elderly people are hard of hearing.]

7. Maintaining patient confidentiality at all times both in and out of the hospital.

8. Following the Scope of Practice. The duties and responsibilities of the Respiratory Care Practitioner are well defined and outlined in the Clinical Competency Packet, the hospital Procedure Manual, and the Laws/Regulations of the Board of Respiratory Care of the Commonwealth of Massachusetts. The student must not perform any procedures and/or assessments that are outside these defined duties.

Under most circumstances, if a student fails to adhere to the appropriate standards of professional conduct:

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Upon a first occurrence the student will receive a verbal warning (#1) by the Instructor and the student will be required to write a satisfactory essay on Professional Behavior as assigned by the Instructor.
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Upon a second occurrence the student will receive a written warning (#2) with a follow-up meeting with the Program Director, The Clinical Coordinator, and the Instructor. The student must satisfactorily complete an assigned project on Professional Behavior. This may require the student to perform additional hours outside of clinical/class to complete the project. The student will be placed on probation until completion of the project AND the end of the current academic year.
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Upon the third occurrence the student will be immediately suspended from clinical/class. This, of course, will prevent the student from continuing on in the sequence and will delay graduation. The student must submit a ten (10) page typed paper on what it means to be a "Professional"; or complete a college level course ( with a grade of "C" or better) on professional behavior in order to be considered in good standing in the Respiratory Care Program.
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If the student is re-admitted to the program, any future infraction will receive an "F" grade for the course, and be immediately dismissed from the Respiratory Care Program.
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In the instance of a serious infraction, the disciplinary process may progress immediately to a written warning or immediate suspension from the program.
Professional Conduct Policy (cont.)

In order to be considered for re-instatement the student must:

1. Re-apply for admission to the Program. Readmission to the program will not be guaranteed and will be on a space available basis in the following academic year.
2. Meet with the Division Review Board consisting of the Division Dean, the Program Director (or his/her designee), and at least one other faculty member.
3. Present to the Review Board a typed, written explanation as to why s/he should be re-instated to the Program.
4. The Division Review Board may:
   a. re-instate the student with or without probation and/or
   b. require additional activities and/or
   c. continue the suspension for a designated period of time and/or
   d. dismiss the student permanently from the Program.

Change in Health Status of Student

Any student with a change in their health status i.e. accidental injury must provide documentation to the program that attendance in clinical or return to clinical is permitted.
NORTH SHORE COMMUNITY COLLEGE
HEALTH PROFESSIONS
CLINICAL/FIELDWORK CANCELLATION POLICY

1. If mandatory college closing (classes cancelled) is required prior to the start of scheduled clinical/fieldwork, the student will not be required to attend clinical/fieldwork for the duration of the cancellation.

2. If mandatory college closing (classes cancelled) during the day/evening, after the student has arrived at clinical/fieldwork site, the student is required to complete assigned procedures prior to leaving the site. The student must ensure patient safety is not compromised and documentation is completed.

3. If mandatory college closing (classes cancelled) is required, the student may have to make up hours/time in order to fulfill program requirements (per program policy).

4. Students may attend clinical/fieldwork on holidays that are not typically observed by health care agencies (i.e. Evacuation Day, College Professional Day, Patriot’s Day, and Bunker Hill Day) or any other day at the program’s discretion.

5. Students may access the college adverse weather/emergency closings by:
   - calling the college adverse weather hotline at (978) 762-4200
   - accessing the college website
   - local television and radio stations

This policy should be communicated to all clinical affiliates and to all students.
NORTH SHORE COMMUNITY COLLEGE
CLINICAL/FIELDWORK WAIVER FORM

I, ___________________________ (student name) a student at NSCC enrolled in a Health Professions program, understand and agree that I am fully responsible for the cost of any physical, emotional or property injury resulting from my transportation, safe conduct to and from the Clinical Agency for/or my participation in clinical activities and thus, will in no way hold the College or faculty/staff member responsible for any injuries and or losses incurred during transit or while participating in any clinical activities including but not limited to medical and dental expenses incurred as a result of my participation in this program; and further, I agree to indemnify and hold harmless the said College against any and all claims, damages and liabilities arising in therefrom.

Student Signature __________________________________________________

PROGRAM: Please circle the program you are enrolled in:

- Medical Assisting
- Occupational Therapy Assistant
- Practical Nursing
- Respiratory Care
- Veterinary Technology
- Nurse Education
- Physical Therapist Assistant
- Radiologic Technology
- Surgical Technology

Date ________________________

Parent’s consent if the student is under 18 years of age. ________________________
## RESPIRATORY CARE PROGRAM

### Normal Values

<table>
<thead>
<tr>
<th>Test</th>
<th>Normal Value</th>
<th>Normal Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALARM VALUES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxygen analyzer</td>
<td></td>
<td>+/- 5-10% from set FIO2</td>
</tr>
<tr>
<td>Ventilator pressure limit</td>
<td></td>
<td>+/- 15 cmH2O from PIP</td>
</tr>
<tr>
<td><strong>Atmospheric Values</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxygen 20.95%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrogen 78.08%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO₂ 0.03%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blood Gas Values</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Arterial</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>7.40</td>
<td>7.35-7.45</td>
</tr>
<tr>
<td>PaCO₂</td>
<td>40 mmHg</td>
<td>35-45 mmHg</td>
</tr>
<tr>
<td>PaO₂</td>
<td>95 mmHg</td>
<td>80-100 mmHg</td>
</tr>
<tr>
<td>SaO₂ @ PaO₂ = 95 mmHg</td>
<td>97%</td>
<td>95-100%</td>
</tr>
<tr>
<td>@ PaO₂ = 60 mmHg</td>
<td>90%</td>
<td></td>
</tr>
<tr>
<td>@ PaO₂ = 40 mmHg</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td>HCO₃</td>
<td>24 mEq/L</td>
<td>22-26 mEq/L</td>
</tr>
<tr>
<td>A-a DO₂</td>
<td>10 mmHg on room air</td>
<td>5-15 mmHg on room air less than 100 mmHg on 100% O₂</td>
</tr>
<tr>
<td>CaO₂</td>
<td>20 vol%</td>
<td></td>
</tr>
<tr>
<td>CvO₂</td>
<td>15 vol%</td>
<td></td>
</tr>
<tr>
<td>CaO₂-CvO₂</td>
<td>5 vol%</td>
<td></td>
</tr>
<tr>
<td>P50</td>
<td>27 mmHg</td>
<td></td>
</tr>
<tr>
<td>Tot CO₂</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>BE</td>
<td>0 mEq/L</td>
<td>-2 to +2 mEq/L</td>
</tr>
<tr>
<td><strong>Venous</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PH</td>
<td>7.36</td>
<td>7.31 – 7.41</td>
</tr>
<tr>
<td>PaCO₂</td>
<td>46 mmHg</td>
<td>41 – 51 mmHg</td>
</tr>
<tr>
<td>PaO₂</td>
<td>40 mmHg</td>
<td></td>
</tr>
<tr>
<td>HCO₃</td>
<td>26 mEq/L</td>
<td></td>
</tr>
<tr>
<td><strong>PULMONARY VALUES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lung compliance (static)</td>
<td>0.2 L/cmH2O</td>
<td></td>
</tr>
<tr>
<td>Lung &amp; chest wall compliance</td>
<td>0.1 L/cmH2O</td>
<td></td>
</tr>
<tr>
<td>Rₙw</td>
<td>1.5 cmH2O/L/sec</td>
<td></td>
</tr>
<tr>
<td>Vₐ/Vₐ</td>
<td>0.3</td>
<td>80%</td>
</tr>
<tr>
<td>FEV₁/FVC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dlco</td>
<td>25 ml/min/torr</td>
<td></td>
</tr>
<tr>
<td>PECO₂</td>
<td>25 mmHg</td>
<td></td>
</tr>
<tr>
<td>VO₂</td>
<td>170 L/min</td>
<td></td>
</tr>
<tr>
<td>MVV</td>
<td>250 ml/min</td>
<td></td>
</tr>
<tr>
<td>VCO₂</td>
<td>200 ml/min</td>
<td></td>
</tr>
<tr>
<td>VA</td>
<td>4 L/min</td>
<td>4-6 L/min</td>
</tr>
<tr>
<td>VE</td>
<td>6 L/min</td>
<td>6-8 L/min</td>
</tr>
</tbody>
</table>
### CARDIAC VALUES

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI</td>
<td>3.2 +/- 0.2 L/min/M2</td>
</tr>
<tr>
<td>SV</td>
<td>50-80 ml/beat</td>
</tr>
<tr>
<td>Q/Qt</td>
<td>2.5%</td>
</tr>
<tr>
<td>PAP</td>
<td>20-30/6-15 mmHg</td>
</tr>
<tr>
<td>CVP</td>
<td>3-8 cmH2O</td>
</tr>
<tr>
<td>PCWP</td>
<td>6-12 mmHg</td>
</tr>
<tr>
<td>Q</td>
<td>4-6 L/min</td>
</tr>
<tr>
<td>PVR</td>
<td>&lt;250 dynes/sec/cm5</td>
</tr>
<tr>
<td>SVR</td>
<td>800-1200 dynes/sec/cm5</td>
</tr>
<tr>
<td>SVI</td>
<td>33-47 ml/beat/m2</td>
</tr>
<tr>
<td>EF</td>
<td>65-75%</td>
</tr>
<tr>
<td>RA</td>
<td>2-6 mmHg</td>
</tr>
<tr>
<td>RV</td>
<td>20-30/0-5 mmHg</td>
</tr>
<tr>
<td>LV</td>
<td>4-12 mmHg</td>
</tr>
<tr>
<td>RA</td>
<td>100-140/0-5 mmHg</td>
</tr>
</tbody>
</table>

### LABORATORY VALUES

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>K+</td>
<td>3.5-5.0 mEq/L</td>
</tr>
<tr>
<td>Cl</td>
<td>95-105 mEq/L</td>
</tr>
<tr>
<td>Na</td>
<td>135-145 mEq/L</td>
</tr>
<tr>
<td>Mg</td>
<td>1.3-2.5 mEq/L</td>
</tr>
<tr>
<td>Ca</td>
<td>4.5-5.8 mEq/L</td>
</tr>
<tr>
<td>Hb males</td>
<td>13-18 gm%</td>
</tr>
<tr>
<td>Hb females</td>
<td>12-16 gm%</td>
</tr>
<tr>
<td>HCT males</td>
<td>39-55%</td>
</tr>
<tr>
<td>HCT females</td>
<td>36-48%</td>
</tr>
<tr>
<td>WBC</td>
<td>5,000-10,000/mm3</td>
</tr>
<tr>
<td>RBC males</td>
<td>4.6-6.2 million/mm3</td>
</tr>
<tr>
<td>RBC females</td>
<td>4.2-5.4 million/mm3</td>
</tr>
<tr>
<td>Glucose</td>
<td>60-110 mg%</td>
</tr>
<tr>
<td>BUN</td>
<td>8-25 mg%</td>
</tr>
<tr>
<td>Bilirubin</td>
<td>0.1-1.2 mg%</td>
</tr>
<tr>
<td>Creatinine</td>
<td>0.6-1.5 mg%</td>
</tr>
<tr>
<td>Albumin</td>
<td>3.5-5.5 gm%</td>
</tr>
</tbody>
</table>

### VITAL SIGNS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR</td>
<td>14 breaths/min</td>
</tr>
<tr>
<td>T oral</td>
<td>37.0°C (98.6°F)</td>
</tr>
<tr>
<td>Axillary</td>
<td>36.5°C (97.6°F)</td>
</tr>
<tr>
<td>Rectal</td>
<td>37.5°C (99.6°F)</td>
</tr>
<tr>
<td>BP</td>
<td>120/80 mmHg</td>
</tr>
<tr>
<td>HR</td>
<td>72 beats/min</td>
</tr>
<tr>
<td></td>
<td>12-20 breaths/min</td>
</tr>
<tr>
<td></td>
<td>100-140/60-90 mmHg</td>
</tr>
<tr>
<td></td>
<td>60-100 beats/min</td>
</tr>
</tbody>
</table>
APPROXIMATE F$_2$O$_8$:

<table>
<thead>
<tr>
<th>DEVICE</th>
<th>1 lpm</th>
<th>2 lpm</th>
<th>3 lpm</th>
<th>4 lpm</th>
<th>5 lpm</th>
<th>6 lpm</th>
<th>7 lpm</th>
<th>8 lpm</th>
<th>10 lpm</th>
</tr>
</thead>
<tbody>
<tr>
<td>nasal cannula</td>
<td>24%</td>
<td>28%</td>
<td>32%</td>
<td>36%</td>
<td>40%</td>
<td>44%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>simple mask</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>35%</td>
<td>55%</td>
<td></td>
</tr>
<tr>
<td>part rebr mask</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Up to 60% properly adjusted</td>
</tr>
<tr>
<td>non-rebr mask</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>close to 100%, tight fitting mask, properly adjusted flow</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Approximate Air:Oxygen Ratios for Common Oxygen Concentrations (according to Mosby’s Respiratory Care, 6th Edition)

<table>
<thead>
<tr>
<th>Percent Oxygen</th>
<th>Air:Oxygen ratio</th>
<th>Total Ratio Parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>0:1</td>
<td>1</td>
</tr>
<tr>
<td>70</td>
<td>0.6:1</td>
<td>1.3</td>
</tr>
<tr>
<td>60</td>
<td>1:1</td>
<td>2</td>
</tr>
<tr>
<td>50</td>
<td>1.7:1</td>
<td>2.7</td>
</tr>
<tr>
<td>40</td>
<td>3:1</td>
<td>4</td>
</tr>
<tr>
<td>35</td>
<td>5:1</td>
<td>6</td>
</tr>
<tr>
<td>28</td>
<td>10:1</td>
<td>11</td>
</tr>
<tr>
<td>24</td>
<td>25:1</td>
<td>26</td>
</tr>
</tbody>
</table>

Please Note: average. Normal values are not exact numbers, but are meant to be guideposts. Normal values frequently vary according to characteristics such as height, weight, age, gender, etc. As practitioners become more experienced, they are better able to "adjust" their expectation of normal values to the specific patient in a specific situation. In addition to the values listed above, this program will consider any other values cited in recognized references.
Student Responsibility for Program Handbook

It is the responsibility of each student to read the Program Handbook. Failure to read the information contained in the Program Handbook will not be considered an excuse for non-compliance or lack of understanding.

The Respiratory Care Program may change policies or revise information due to institutional and/or program circumstances. When indicated, changes will be made known to students and the Program Director will distribute the updated information.

Each student is required to read, understand, and agree to comply with all policies stated in this handbook. An acknowledgement form is provided on the next page and must be signed by the student to indicate his or her agreement. This signed form will be maintained by the Program Director.
Respiratory Care Program

Program Handbook Acknowledgement Form

I, ________________________________, have received, reviewed, and understand the content in this Program Handbook. I am aware of and accept my responsibility to both the college and the program with regard to rules and regulations governing student performance. As a student of North Shore Community College’s Respiratory Care Program, I understand that I am to maintain the attitudes and behaviors reflected in these guidelines. My signature below indicates my commitment to abide by the policies and procedures within this handbook.

__________________________________________  ____________________________
Student’s Signature                          Date

__________________________________________
Student’s Printed Name