

**Academic Program Review Report**  
**Respiratory Care Program**  
**College of Allied Health Sciences**  
**Ferris State University**



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## **Section 1: Program Overview**

### **Program History**

The Respiratory Care Program at Ferris State University began in 1972 in response to the demand for qualified respiratory therapists in western Michigan. It was the fourth such respiratory program in state. The program is accredited by the Committee on Allied Health Education Programs (CAHEP). The Committee on the Accreditation of Respiratory Care (Co ARC) program establishes accreditation requirements, conducts on-site accreditation visits, and recommends accreditation actions to the CAHEP. FSU's Respiratory Care Program has undergone five accreditation visits since 1982. The FSU Respiratory Care program has been granted full accreditation each time. The next scheduled program on-site accreditation visit is Fall 2012.

### **Current Program Structure**

The current Respiratory Care Program has only one admission criteria: 2.5 GPA from high school or college. The current curriculum includes a six semester sequence of professional courses but has not required a specific sequence for completion of general education courses. A recent comprehensive curriculum review by the Respiratory Care faculty and their Advisory Board resulted in implicit recommendations to improve the program by establishment of prerequisites courses along with more specific admission criteria.

The new curriculum that will become effective in Fall 2010 includes a full-time and part-time sequence to meet the needs of traditional and non-traditional students. The first format is a full-time sequence program completed in six academic semesters including two semesters of prerequisite courses. The professional sequence courses are completed in four (4) semesters on the Big Rapids campus. During semester two, three and four a clinical practicum is completed at one of our clinical affiliates located throughout the state in addition to completion of didactic courses.

The second format of the program is a seven semester part-time sequence program in addition to completion of prerequisites courses. This format has allowed us to meet the needs of the both the respiratory care community and the non-traditional students throughout the state. We have held programs in Alpena, Escanaba, Grand Rapids, Lansing and Harrison.

A total of 72 semester hours of credit are required in the new curriculum and lead to an Associate of Applied Science degree in Respiratory Care. Graduates are eligible to take the national credentialing examination sponsored by the National Board for Respiratory Care (NBRC) and apply for licensure to practice.

The results of this curriculum revision will be discussed in more detail in Section 3 of the report.

## **A. Program Goals**

### **1. State the Goals and Mission of the Program**

#### **Mission**

Building upon the mission, vision and values of the College of Allied Health Sciences, the Respiratory Care program prepares highly qualified and competent professionals for successful and rewarding careers as respiratory therapists.

#### **Program Goals**

1. Graduates of the Respiratory Care Program will utilize the knowledge and professional competencies required to practice as an entry-level Respiratory Therapist
2. Graduates of the Respiratory Care Program will communicate effectively as a member of an interdisciplinary health care team.

3. Graduates of the Respiratory Care Program will apply previously learned knowledge to the solution of new problems.
4. Graduates of the Respiratory Care Program will demonstrate professional and ethical behaviors.
5. The Respiratory Care Program will continue to meet the standards of the Commission on Accreditation of Allied Health Programs and the Committee on Accreditation for Respiratory Care to maintain specialized accreditation.

**2. *Explain how and by whom the goals were established.***

In compliance with the Commission on Accreditation for Respiratory Care (CoARC) Policies and Procedures and the College of Allied Health Sciences Assessment Plan, the program goals were established by the faculty with consultation of the advisory board. These goals can be measured through student assessment and learning outcomes.

**3. *How do the goals apply to preparing students for careers in and meeting employer needs in the community/region/marketplace.***

The goals meet the requirements set forth by CoARC, follow the University's mission and are designed to measure programmatic and student learning outcomes that best meet the needs of the respiratory care profession and employers.

**4. *Have the goals changed since the last program review? If so, why, and how? If no, why not?***

Yes, the program goals were revised during the Fall 2008 major curriculum clean up that will be implemented Fall 2010.

**5. *Describe the relationship of the program goals to the University's mission, and the departmental, college and divisional strategic plans.***

Building upon the mission, vision and values of Ferris State University, the College of Allied Health Sciences' mission is to prepare students for successful careers in the various programs contained within the college, to foster responsible citizenship and to promote lifelong learning. The college will depend upon partnerships with health care providers and organizations for advice in the preparation of students for rapidly changing careers. Building upon this university and college mission, vision and values, the Respiratory Care program prepares highly qualified and competent professionals for successful and rewarding careers as respiratory therapists.

***B. Program Visibility and Distinctiveness***

**1. *Describe any unique features or components of the program.***

The program is the only COARC/CAAHEP accredited university based Respiratory Care program in the State of Michigan. We provide our students the opportunity to earn a Bachelor of Science degree in Health Care Systems Administration while at Ferris in addition to their Associate of Applied Science degree in Respiratory Care. The other programs in Michigan are at the community college level and do not offer this option for their graduates. Oakland University does offer a Bachelor of Science in Applied Health Sciences with a concentration in Respiratory Care by accepting the associate respiratory credits but does not offer respiratory care courses.

The FSU program structure allows students to complete their didactic classes on campus or online and attend internship in another area of the state. For example, students may complete internship in Detroit, Grand Rapids or Northern Michigan. Another unique characteristic is that in addition to the full-time sequence Big Rapids program, the respiratory care program offers a part-time sequence at off campus sites. Off campus students are based in Alpena, Escanaba, Grand Rapids, Harrison and Lansing. These off campus students take their didactic courses online and participate in labs at off campus sites prior to completing their clinical internships in the healthcare setting.

## **2. Describe and assess the program's ability to attract quality students.**

The Respiratory Care program has been a long standing quality program. It has been in existence for 37 years and maintains an excellent reputation throughout the state. The part-time sequence program offered at off-campus sites is very attractive to the adult learner. This has become evident in these difficult economic times as employees become displaced from their job and look for opportunities to retrain and learn a new profession. Many employers, current students and alumni refer potential students to the program based on this reputation and flexibility.

The program also recruits students through the following activities:

- Recruiting students in high schools and career technical centers.
- Participating in DAWG Days and Educator's Academy on campus.

## **3. Identify the institutions that are the main competitors for prospective students in this program.**

The competitors are:

- Delta College
- Henry Ford Community College
- Kalamazoo Valley Community College
- Macomb Community College
- Monroe Community College
- Mott Community College
- Muskegon Community College
- Oakland Community College

### **a. How are these programs similar and different from the FSU program?**

Community College locations are integrated and hospital sites are often within driving distance for their students. Students are routinely on campus for classes and have direct contact with faculty for the two years of the program.

### **b. What can be learned from them that would improve the program at Ferris?**

The FSU clinical model for the respiratory care program facilitates internship site visits only once or twice during the rotation. This clinical visitation schedule and model makes it difficult for Ferris to compete for clinical sites with the community colleges that visit the site every week or assign faculty to the hospital. Methods of communication between Ferris and the sites need to be strengthened when we are constantly compared to the community colleges that make more frequent clinical visits.

All community college respiratory care programs in Michigan pay a stipend to the hospitals to offset their student supervision. These stipends paid by the community colleges have limited our ability to place students at most hospitals. A FSU approved stipend to the clinical sites would be very helpful when we are competing with eight community college programs for clinical sites.

## **C. Program Relevance.**

### **1. Provide a labor market demand analysis.**

According to the *Occupational Outlook Handbook, 2008-09 Edition*, respiratory therapists and respiratory therapy technicians have a positive job outlook, with the number of jobs expected to grow "faster than the average for all occupations." Between the years of 2006-2016, there is projected to be a 19% increase in the growth of jobs for respiratory care practitioners. It is noted that respiratory therapists with expertise in working with infants and those possessing cardiopulmonary care skills will be especially in demand. The faster than average job growth that is forecast for respiratory therapists is attributed to the increased middle-aged and elderly population in this time period that will increase the numbers of individuals with cardiopulmonary problems; the increased number of surviving neonates needing respiratory care; as well as the increasing responsibility that this profession will be assuming in areas such as case management, preventive care, early disease detection, and emergency care work (Bureau of Labor Statistics, U.S. Department of Labor, 2008).

The positive national job outlook for respiratory therapists and respiratory technicians is also seen within Michigan, according to statistics available from *Career Infonet* that are based on data from the Bureau of Labor Statistics.

Job growth forecasts, pay information, and educational level data are presented in a tabular format in the **Appendix A: Labor Market Analysis and Citations**

The American Association for Respiratory Care (AARC) has also done labor market analyses. The most recent study, the *2005 American Association for Respiratory Care Human Resources Survey*, supports the assertions that the demand for respiratory therapists is on the rise.

Some key findings from this study include:

- A 19% increase in the number of working respiratory therapists between 2000-2005.
- A considerable increase in hourly wages between 2000-2005, as well as increases in starting wages for recent graduates.
- Significant growth in the number of respiratory therapists possessing a bachelor's degree or higher, rather than the entry-level associate's degree. In 2000, 30.4% of respondents indicated that they had a bachelor's degree or higher degree, while in 2005, 45.4% indicated a minimum educational level of a bachelor's degree (AARC, 2006).

While the associate degree is still the terminal degree at Ferris State University for respiratory therapists, according to the Bureau of Labor Statistics the advancement opportunities are better for those with a bachelor or higher degree (Bureau of Labor Statistics, U.S. Department of Labor, 2008). Indeed, the vast majority of accredited respiratory care programs are offering a bachelor of science degree. According to the Commission on Accreditation of Allied Health Education Programs (CAAHEP), "45 entry-level and 334 advanced respiratory therapy programs were accredited in the United States in 2006" (as cited in Bureau of Labor Statistics, U.S. Department of Labor, 2008, online). The AARC survey also indicated that the number of respiratory therapists with advanced degrees have risen significantly over a recent five-year time period.

To address the educational attainment trends, Ferris State University Respiratory Care students have the opportunity to apply for the bachelor's program in Health Care System Administration. This opportunity will help to keep the Ferris graduates competitive with those holding degrees beyond the terminal associate's degree. A future direction of the program may be to consider offering a bachelor's degree in respiratory care.

From the information presented above, it is apparent that the job outlook for respiratory therapists is positive. The Respiratory Care program at Ferris State University is well-positioned to train students in a career with good employment opportunities.

## **2. Describe and assess how the program responds to emerging issues in the discipline, changes in the labor force, changes in employer needs, changes in student needs, and other forces of change.**

As is the case in all allied health professions, the need to stay current is paramount in respiratory care. In staying current, there is the continuous need to adapt to changes that are occurring within the profession that impact both the educational and occupational realms of the field. In order to stay current within the field of respiratory care, the respiratory care faculty attend professional conferences, communicate and network with respiratory therapists and stay engaged with the literature in the field. To stay aware of changing student and employer needs, the respiratory care faculty interacts with preceptors and students on a regular basis, and takes formal assessments and informal input into consideration from these sources.

The respiratory care program has been very receptive to both implicit and explicit appeals for change and this is largely reflected in the major curriculum revision that is discussed in other areas of this

report. The curriculum revision was undertaken to address the needs of the students, profession, employers and to adapt to changes in the dynamic field of respiratory care.

The respiratory care labs are another way that the program responds to emerging issues and trends within the discipline. While teaching fundamental skills, the laboratories are also designed to keep pace with new and emerging trends within the discipline. Students are exposed to procedures and technologies that reflect current best practices within the field. The laboratories provide a clinical simulation of current practices in respiratory care that students can apply to the clinical environment. The field of respiratory care is fortunate to have an above average market outlook for the near future. Even with the positive outlook for future employment, the respiratory care program at Ferris State University strives to make its' students competitive in the marketplace by providing courses and clinical experiences that are designed to facilitate clinical excellence. One recent educational trend in the field of respiratory care is the tendency for a greater number of practitioners to enter the field with a minimum of a bachelor's degree. To address this trend and enhance the competitiveness of respiratory care students graduating from FSU, the College of Allied Health Sciences provides the opportunity for respiratory care students to enter the Health Care System Administration program to obtain a Bachelor of Science degree. In addition, respiratory care training at the Bachelor of Science degree level is being explored by the American Association of Respiratory Care (AARC).

The overall structure of the respiratory care program, with off-campus cohorts and online courses is a testament to the willingness of the program to meet to the needs of students and profession and to stay current with educational trends. The structure of this program allows many non-traditional and off-site students who may otherwise not have been able to pursue this career path to receive training in a field that is in need of a greater number of practitioners.

Based on the major curricular revisions that were undertaken to address student and occupational needs, it is apparent that the respiratory care program is very responsive to the need for change and strives to address these needs in an effective manner. Future directions of the program will continue to address the changing needs of students, employers and the field of respiratory care while maintaining a strong curriculum founded on solid pedagogical principles.

### **3. Assess why students come to FSU for the program. Summarize the results of the graduate exit survey and the student program evaluation.**

#### **a. How well does the program meet student expectations?**

The August 2008 respiratory care graduate exit survey gleaned responses from 5 graduates, all of whom were employed at the time of the survey. 80% of the respondents indicated that they had obtained their Certified Respiratory Therapist credentials. The majority of respondents indicated that their knowledge of respiratory care and general medical knowledge was adequate, which also mirrored the responses for the majority of respondents indicating that their clinical skills, including patient assessment, treatment and ability to interpret test results was acceptable.

The student program evaluation survey results, as prepared by Institutional Research and Testing in August of 2008, indicate that the majority of respondents believe that the professors are effective classroom and lab teachers and that instruction is based on clearly stated objectives.

#### **b. How is student sentiment measured?**

The majority of respondents of the graduate exit survey indicated that they would recommend respiratory care program to others considering pursuing a career in the field. All respondents indicated that finding employment in their profession was easy to moderately easy to find. 60% of respondents indicated that the program quality was very good.

## **D. Program Value**

### ***1. Describe the benefit of the program, facilities, and personnel to the University.***

The Respiratory Care Program benefits the University by offering an on-campus lab equipped with “Sim Man (a sophisticated adult manikin able to simulate a critically ill patient),” complete lung function testing equipment, a treadmill with a metabolic cart and a simulated hospital patient-care area with medical gas and vacuum capability. These resources are arranged to closely simulate a safe hospital-like experience. This array of equipment and simulated hospital environment is an incentive for students to enroll at FSU compared to other respiratory care program settings.

The University also benefits from the state-wide outreach arm of the program. Besides Big Rapids, there are cohorts in different locations throughout Michigan. The University is currently represented off-campus in Grand Rapids, Lansing, Harrison, Escanaba, and Alpena. In addition, Petoskey will be represented and has been scheduled to accept students in Fall 2009.

The University also benefits in a cross-program method. The Respiratory Care and Nursing Departments have exchanged faculty for lectures and simulations in areas relating to specific disciplinary strengths. The University shares portable equipment with the respiratory cohorts throughout the State. This includes four portable lung testing machines and two portable ECG machines. Smaller devices, equipment, and supplies are used at all sites including the Main Campus. Major equipment such as mechanical ventilators are rented and delivered to off campus sites.

### ***2. Describe the benefit of the program facilities, and personnel to the students enrolled in the program.***

Ferris Respiratory Care students spend numerous hours in an on-campus laboratory setting practicing technical maneuvers, therapy and patient care protocols before entering the clinical experience. Students are at an advantage when compared to other respiratory care programs when they arrive at their clinical site ready to perform because they have had considerable practice in patient care procedures and critical thinking on-campus.

Respiratory faculty are able to provide a wide-range of hospital and homecare practical experience. Some faculty have 25 to 30- plus years of actual patient-care knowledge and practice to provide the students an actual feel of what happens in the real world of healthcare. Full-time faculty are all licensed by the State of Michigan and are all Registered Respiratory Therapists (RRT). Two faculty have a Master's degree and two full-time temporary faculty members are in the process of obtaining this degree. One is a Registered Pulmonary Function Technologist (RPFT) and another is a Certified Asthma Educator (AE-C). The program faculty are dedicated to the profession of Respiratory Care and to Ferris State University.

The program utilizes experienced adjunct faculty to instruct the off-site programs. Each course is reviewed and updated by the full-time staff on a regular basis. Adjunct faculty use this material to ensure all students are receiving up-to-date and approved educational materials.

The program also uses hospital-based RRTs to instruct and supervise students in their clinical rotations. This allows continuity of instruction for the students and familiarity of faculty for hospital staff. The Respiratory Care Program and Nursing Departments have exchanged faculty for lectures and simulations in areas relating to specific disciplinary strengths. This method has the benefit of allowing students of both programs to experience a “specialist” training and experience.

### ***3. What is the assessment of program personnel of the value of the program to employers?***

The value of the University Respiratory Care Program to employers is twofold. First, the program will provide future respiratory therapists to meet the national shortage. This shortage is projected to increase over the next ten years.



Second, students will have cutting-edge knowledge and skill training. These advantages will not only allow students to perform superior patient care but graduates will also be able to manage the patient's care referred to as "patient-care management." Individuals capable of appropriately managing the progression of treatment will become extremely valuable to an employer.

**4. Describe the benefit of the program, faculty have provided to accreditation bodies, and regional, state, and national professional association; manuscript reviewing, services on editorial boards; use of facilities for meetings, etc.**

The faculty participates in local, statewide, and national continuing education activities. Faculty attends seminars and also provides lectures to their peers. This participation keeps faculty current with issues occurring in the field. All faculty members are also interested in staying current with state and national organizations.

One member is currently an elected delegate to the American Association for Respiratory Care (AARC) and also serves on the Executive Board of the Michigan Society of Respiratory Care (MSRC). Another faculty member serves as a board member for the Asthma Network of West Michigan (ANWM).

**5. What services for extra-University general public groups (e.g. presentations in schools or to community organizations) have faculty, staff or students provided? Describe how these service benefit students, program and community.**

The Program faculty have made numerous presentations during DAWG Days and for the College of Allied Health Sciences "Open Lab" tours for numerous high schools throughout the year.

Demonstrations on simple lung function testing with an emphasis on asthma are currently being planned for Big Rapids and Grand Rapids high schools. The purpose of these events is to increase asthma awareness and recruit students to the university and profession.

## Section 2: Collection of Data

### A. Graduate/Alumni follow- up survey

<b>Section I: For the following survey questions</b>						
<b>Please answer: 1 - Yes or 2- No</b>		<b>Yes</b>	<b>No</b>			
1	Are you employed as a respiratory therapist?	7	2			
2	Have you not been able to find employment as a respiratory therapist?	2				
3	Are you employed in a profession other than respiratory care?		9			
4	Are you continuing your education and this is why you are not employed as a respiratory therapist?		9			
5	Are you employed by a site where you did your internship?	4	5			
6	Are you making \$40,000 or more as a respiratory therapist?	2	7			
7	Do you feel adequately or well prepared for the credentialing and registry exams?	7	2			
8	Do you feel adequately prepared for a job as an entry level respiratory therapist?	8	1			
9	Are you interested in any of the specialty credentials? AE-C? NPS? CPFT? RPFT?	3	6			
10	Would you recommend the program to a friend or family member?	7	2			
<b>Section II: For the following survey questions; Rate them</b>						
<b>1= Excellent 2= Good 3= Fair 4=Poor 5= Unacceptable</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1	How would you rate the quality of the respiratory care program on a scale of 1-5?	1	2	5	1	
2	If you are working: are you working full-time, part time or PRN?	FT	PT	PRN		
		6	2	1		
3	If you are working: are you working in a hospital? Home care? Sales? Long term care?	Hospital	Home Care	Sales	Long Term	
		8	1	0	0	
4	If you are working in a hospital: are you working in the emergency room? Adult ICU? PICU?	ED	Adult ICU	PICU	NICU	
		0	7	1	1	
<b>Section II: For the following survey questions</b>						
<b>Rate them; 1=Excellent 2= Good 3= Fair 4=Poor 5= Unacceptable</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1	Did you feel the textbooks used by the program were adequate?	1	5	2	1	
2	Did you feel that the test and quizzes given by the program were fair?	1	5	2	1	
3	Did you feel the class sequence was adequate?	3	4	2		
4	Did you feel the courses were practical?	3	4	2		
5	Did you feel the schedule of the classes was adequate?	3	4	2		
6	Did you feel the instructors were available?	2	4	3		
7	Did you feel instructor feedback was adequate?	1	5	2	1	
8	Did you feel the audiovisual aids were adequate?	1	3	5		
9	Did you feel the educational resources were adequate?	1	5	2	1	
10	Did you feel the quality of library resources were adequate?	3	3	3		
11	Did you feel the overall effectiveness of the academic portion of the program was adequate?	2	4	3		
12	Did you feel the organization of the clinical portion was adequate?	1	1	3	3	1

13	Did you feel the clinical instructor was available?	1	3	4	1	
14	Did you feel the clinical coordinator was available?	1	1	3	3	1
15	Did you feel the communication between the clinical staff and students was adequate?	1	2	3	3	
16	Did you feel the clinical staff was professional?	3	4	2		
17	Did you feel the amount of time spent in clinical was adequate?	1	2	5	1	
18	Did you feel the rotations outside the hospital were adequate?	1	3	4	1	
19	Did you feel the length of rotations was adequate?	3	4	2		
20	Did you feel the effectiveness of the clinical portion of the program to be adequate?	3	4	2		
21	Did you feel there was enough time to review and complete class assignments during clinical?	1	3	4	1	
22	Did you feel policies to be fair and adequate?	1	3	4	1	
23	Did you feel the program willingness to incorporate student ideas to be adequate?	1	2	5	1	
24	Did you feel the overall effectiveness of the program to be adequate?	2	3	4		
25	Did you feel the effectiveness of student services to be adequate?	3	4	2		
26	Did you feel the effectiveness of leadership of college administration to be adequate?	1	3	5		

**Discussion:**

The Graduate Alumni Survey was sent out to 15 current graduate of the Respiratory Care Program. A total of 9 of 15 responded to the survey. The survey showed that 77.8% of the graduates were employed as Respiratory Therapists with 67% employed full-time and 77% working in the Adult Intensive Care Unit, 12% in Neonatal Intensive Care Unit, and 11% in Pediatric Intensive Care Unit. 44% were employed by the hospital where they completed their internship. Only 22% were earning a salary of greater than \$44,000 per year.

89% of graduates indicated that they felt adequately prepared to perform the job as a entry level Respiratory Therapist. Another 78% of the graduates indicated that they felt adequately prepared to take the credentialing exam.

The graduate student rated 23 of the 26 questions regarding the various aspects of the program with a rating responses ranging from 1 as excellent to 3 as fair. There were 3 questions that the students rated poorly in the area of Clinical organization, availability of the clinical coordinator and communication. The questions were:

*Did you feel the organization of the clinical portion was adequate?*

*Did you feel the clinical coordinator was available?*

*Did you feel the communication between the clinical staff and students was adequate?*

The responses reinforced several ongoing problems in the clinical management of upward of 90 plus students doing their clinical experience through 27 Medical Centers spread out throughout Michigan. Although there were concerns expressed regarding the clinical internship, 78% of the students expressed that they would recommend the Respiratory Care program to their friends or family member. Also 89% rated the quality of the program an average score of 2.66.

This chart summarizes the main concerns identified by the graduate/ alumni survey and the action plan that has been implemented to fix the problem:

Problem Identified	Action Taken
1. Clinical (student) Scheduling was late.	Plan to distribute clinical schedule earlier.
2. Availability of Clinical Coordinator.	New Clinical Coordinator has been identified for Fall 2010.
3. Poor Communication between clinical staff and students.	Plan to schedule frequent communication sessions between program faculty and clinical staff.

**B. Employer follow-up survey**  
**Employer Survey 2009**

Q1 Knowledge of Graduate	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree	Question Average
Has solid professional knowledge base	0	3	5	5	3.15
B. Has solid general medical knowledge base	0	5	4	4	2.92
C. Accurately interprets pertinent clinical information	0	4	3	6	3.15
D. Recommends appropriate therapeutics	0	5	2	6	3.08
E. Makes sound clinical judgments	0	4	4	5	3.08
Total	0	21	18	26	<b>3.08</b>
Percentage	0%	32%	28%	40%	
Percent Somewhat Agree & Strongly Agree					68%
Q2					
Additional comments regarding knowledge base	Not a strong therapist Lacked comprehension of important concepts Student still need a stronger knowledge base If student had not worked prior - would not be ready				

Q3 Technical Ability of Graduate	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree	Question Average
A. Is proficient in clinical skills required for job	0	4	4	5	3.08
B. Can efficiently perform overall pt assessment	0	4	2	7	3.23
C. Competently performs therapeutic procedures on job	0	4	2	7	3.23
D. Competently performs diagnostic procedures on job	0	4	4	5	3.08
Total	0	16	12	24	<b>3.15</b>
Percentage	0%	31%	23%	46%	
Percent Somewhat Agree & Strongly Agree					<b>69%</b>

Q4	
Additional comments regarding clinical proficiency	Not a strong therapist Student lacked adequate lab practice Disappointed with student ability to pass RRT Exam

Q5 Communication Skills & Attitude of Graduate	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree	Question Average
A. Has effective oral communication skills	0	1	5	6	3.42
B. Has effective written communication skills	1	2	1	8	3.33
C. Behaves in ethical & professional manner	2		2	8	3.33
D. Functions effectively as member of healthcare team	0		5	7	3.58
E. Accepts supervision and works effectively w/supervisor	0	1	3	7	3.55
F. Is self-directed & responsible for his/her actions	1		3	7	3.80
G. Arrives to work prepared and on time	1		4	7	3.42
H. Contributes to a positive environment in department	2		4	6	3.17
I. Displays respect for beliefs and values of all persons	1		4	7	3.42
Total	8	4	31	63	3.41
Percentage	8%	4%	29%	59%	
Percent Somewhat Agree & Strongly Agree					78%
Q6					
Additional comments regarding behavioral skills	Poor professionalism, acts inappropriate, bad behavior Student compared fairly well with campus trained student Difficult to accurately rate this area Program does not work effectively for low performers				

**Very Dissatisfied = 1, Somewhat Dissatisfied = 2, Somewhat Satisfied, Very Satisfied = 4**

Q7 Quality of Graduate	Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	Question Average
Please rate your level of satisfaction with the overall quality of the Program's graduate.	1	4	1	7	3.08
Percentage	8%	31%	8%	54%	
Percent Somewhat Satisfied & Very Satisfied					62%
Q8					
Additional comments regarding satisfaction with quality of the Program's graduate.	Had expected a stronger knowledge base, assessment skill work ethic lacking, documentation skill poor Ferris puts out high quality RCP's Would like opportunity to hire another Ferris grad Unable to pass boards in timely fashion Very impressed -have 1st hand knowledge of other programs Would benefit from more face to face contact w/ instructor Students who are well motivated -perform well				

Bookwise prepared, ill-prepared regarding equipment  
 Very satisfied

Q9 Strengths of Graduate

What are the strengths of this graduate	Very competent in all aspects of Respiratory care Strong Clinical skills Very friendly Good clinical skills very apparent from start Willingness to work and learn Very reliable and motivated -strives for excellence Calm, cautious, good team player Smart, great teamwork, flexible, willing to learn
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Q10 Pre-Employment Skills of Graduate

What qualities/skills did you expect of this graduate that he/she did not possess when first employed	Documentation skill Stronger critical thinking skill ABG interpretation Students cannot translate didactic knowledge into practice Hard time answering didactic knowledge into clinical context Basic equipment skills and assessment Self confidence Independent ventilator management
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Q11

Suggestions for better preparing future graduates	More face to face learning Spend more time in NICU/PICU Better prescreening of potential program candidates More supervision at clinical sites More equipment available in cohort lab sites More lab time More Critical Care experience More Hemodynamic experience
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Q12 Additional comments None entered

Q13	Yes	No
Are you the graduate's immediate Supervisor?	11	1
Q14	Check all applicable	
Graduate Eligibility	Check all applicable	
CRT eligibility	1	
RRT eligibility	5	
CRT	5	
RRT	5	
CPFT	0	
RPFT	0	

NPS	0
RPSGT	0

Q15	
Name of Graduate	**Unable to publish Names

Q16		
Length of graduate's employment at time of completing this evaluation in years and months	13 years	1
	5 years	1
	2 years	1
	1.5 years	3
	1 years	1
	6 months	2
	2-3 months	3

**Discussion:**

Surveys were mailed to employers identified from the number of sites where University Respiratory students were assigned their clinical rotation.

The survey tool used the following rating scheme:

Strongly Disagree = 1, Somewhat Disagree = 2, Somewhat Agree = 3, Strongly Agree = 4

Survey Results: The tables below present employer responses to the Program survey tool. The data was tabulated for each question subset with the average score reported. The aggregate data for each question was then summarized from the subsets. The overall satisfaction score in all categories was **3.24**.

Employer open-ended comments were also recorded to capture specific concerns.

Employers felt that 68% of Program graduates had the requisite knowledge for the position.

Employers felt that 69% of Program graduates had the requisite technical ability to function in the position.

Employers felt that 78% of Program graduates had appropriate communication skills and exhibited a professional demeanor.

62% of employers felt the Program produced quality graduates.

The employer response is based on the current curriculum and faculty members that are no longer employed at Ferris. Several comments have already been addressed in the new curriculum to be implemented Fall 2010 and with the new faculty members. The chart summarizes the main concerns identified by the employer survey and the action plan that has been implemented to fix the problem:

<b>Problem Identified</b>	<b>Action Taken</b>
Knowledge and Technical abilities represented 30% of the employers concerns.	Comprehensive Lab Finals were recently developed to better prepare the students for the hospital clinical experience.

## B. Graduating student exit survey

### Respiratory Care APR...Graduates

#### Frequencies

Prepared by: Institutional Research & Testing, 08/08

#### Statistics

	N		Mean	Median	Std. Deviation
	Valid	Missing			
q1 Current job title	5	0	2.00	2.00	1.000
q1a Other Specified	5	0			
q2 How long in current position	5	0			
q3 No. hrs work in average week	5	0			
q4a Shift: 8 hour	5	0	.40	.00	.548
q4b Shift: 10 hour	5	0	.00	.00	.000
q4c Shift: 12 hour	5	0	.80	1.00	.447
q5a Eligibility/Credential Status: CRT Eligible	5	0	.20	.00	.447
q5b Eligibility/Credential Status: CRT	5	0	.80	1.00	.447
q5c Eligibility/Credential Status: RRT Eligible	5	0	.80	1.00	.447
q5d Eligibility/Credential Status: RRT	5	0	.00	.00	.000
q5e Eligibility/Credential Status: CPFT	5	0	.00	.00	.000
q5f Eligibility/Credential Status: NPS	5	0	.00	.00	.000
q5g Eligibility/Credential Status: RPFT	5	0	.00	.00	.000
q5h Eligibility/Credential Status: Other	5	0	.00	.00	.000
q5i Eligibility/Credential Status: Other Specified	5	0			
q6 Knowledge: Respiratory care	5	0	2.80	2.00	1.304
q7 Knowledge: General medical	5	0	2.20	2.00	.837
q8 Knowledge: Assess pts accurately/efficiently	5	0	2.20	2.00	1.643
q9 Knowledge: Collect & interpret pt data effectively	5	0	2.40	2.00	1.673
q10 Knowledge: Recommend approp diag/therapeutic procedures	4	1	2.25	2.00	1.258
q11 Knowledge: Use sound judgment while in healthcare setting	4	1	2.50	2.00	1.732
q12 Clinical: Perform all clinical skills	4	1	2.75	2.50	.957
q13 Clinical: Perform accurate/efficient pt assessment	4	1	2.75	2.00	1.500
q14 Clinical: Perform/utilize therapeutic procedures/modalities	4	1	2.25	2.00	1.258
q15 Clinical: Perform/interpret all diagnostic procedures	4	1	3.00	3.00	1.633
q16 Behavioral: Communicate effectively	4	1	2.25	1.50	1.893
q17 Behavioral: Conduct myself in ethical/professional manner	4	1	2.00	2.00	1.155
q18 Behavioral: Effective time management	4	1	2.50	2.00	1.915
q19 Behavioral: Encouraged me to apply for/pass CRT exam	4	1	2.00	2.00	.816
q20 Behavioral: Encouraged me to apply for/pass RRT exam	5	0	1.80	2.00	.447
q21 Have actively pursued NBRC CRT credential	5	0	1.00	1.00	.000
q22 Have actively pursued NBRC RRT credential	5	0	1.40	1.00	.548
q23 Member of a state respiratory care profes'l assn	5	0	1.20	1.00	.447
q24 Member of Amer Assn for Respiratory Care	5	0	1.60	2.00	.548
q25 Actively participate in continuing ed activities	5	0	1.20	1.00	.447
q26 If "no" to q21-25, please explain	5	0			
q27 Overall: Academic advising was effective	5	0	2.00	2.00	.707
q28 Overall: Recommend prog to someone considering resp ther	5	0	2.60	2.00	1.817
q29 Overall: How easy to find employment in resp therapy field	5	0	1.40	1.00	.548
q30 Overall quality of program	5	0	3.00	2.00	1.414
q31 Name 2-3 strengths of program	5	0			
q32 2-3 suggestions to strengthen program	5	0			
q33 Qualities/skills expected not in program	5	0			
q34 Additional comments	5	0			



## Frequency Table

### q1 Current job title

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Staff Therapist	2	40.0	40.0	40.0
	Therapist	1	20.0	20.0	60.0
	Other	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

### q1a Other Specified

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	60.0	60.0	60.0
	CRT/LRT	1	20.0	20.0	80.0
	RT in Neuro/Trauma ICU	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

### q2 How long in current position

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 month	2	40.0	40.0	40.0
	2 months	1	20.0	20.0	60.0
	6 months	1	20.0	20.0	80.0
	7 months	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

### q3 No. hrs work in average week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	36-40	1	20.0	20.0	20.0
	36-48	2	40.0	40.0	60.0
	40	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

### q4a Shift: 8 hour

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not checked	3	60.0	60.0	60.0
	Checked	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q4b Shift: 10 hour**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not checked	5	100.0	100.0	100.0

**q4c Shift: 12 hour**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not checked	1	20.0	20.0	20.0
	Checked	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**q5a Eligibility/Credential Status: CRT Eligible**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not checked	4	80.0	80.0	80.0
	Checked	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q5b Eligibility/Credential Status: CRT**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not checked	1	20.0	20.0	20.0
	Checked	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**q5c Eligibility/Credential Status: RRT Eligible**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not checked	1	20.0	20.0	20.0
	Checked	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**q5d Eligibility/Credential Status: RRT**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not checked	5	100.0	100.0	100.0

**q5e Eligibility/Credential Status: CPFT**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not checked	5	100.0	100.0	100.0

**q5f Eligibility/Credential Status: NPS**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not checked	5	100.0	100.0	100.0

**q5g Eligibility/Credential Status: RPFT**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not checked	5	100.0	100.0	100.0

**q5h Eligibility/Credential Status: Other**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not checked	5	100.0	100.0	100.0

**q5i Eligibility/Credential Status: Other Specified**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	80.0	80.0	80.0
	LRT	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q6 Knowledge: Respiratory care**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Generally Agree	3	60.0	60.0	60.0
	Neutral/Acceptable	1	20.0	20.0	80.0
	Strongly Disagree	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q7 Knowledge: General medical**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	1	20.0	20.0	20.0
	Generally Agree	2	40.0	40.0	60.0
	Neutral/Acceptable	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q8 Knowledge: Assess pts accurately/efficiently**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	2	40.0	40.0	40.0
	Generally Agree	2	40.0	40.0	80.0
	Strongly Disagree	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q9 Knowledge: Collect & interpret pt data effectively**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	2	40.0	40.0	40.0
	Generally Agree	1	20.0	20.0	60.0
	Neutral/Acceptable	1	20.0	20.0	80.0
	Strongly Disagree	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q10 Knowledge: Recommend approp diagnostic/therapeutic procedures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	1	20.0	25.0	25.0
	Generally Agree	2	40.0	50.0	75.0
	Generally Disagree	1	20.0	25.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**q11 Knowledge: Use sound judgment while in healthcare setting**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	1	20.0	25.0	25.0
	Generally Agree	2	40.0	50.0	75.0
	Strongly Disagree	1	20.0	25.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**q12 Clinical: Perform all clinical skills**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Generally Agree	2	40.0	50.0	50.0
	Neutral/Acceptable	1	20.0	25.0	75.0
	Generally Disagree	1	20.0	25.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**q13 Clinical: Perform accurate/efficient pt assessment**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Generally Agree	3	60.0	75.0	75.0
	Strongly Disagree	1	20.0	25.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**q14 Clinical: Perform/utilize therapeutic procedures/modalities**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	1	20.0	25.0	25.0
	Generally Agree	2	40.0	50.0	75.0
	Generally Disagree	1	20.0	25.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**q15 Clinical: Perform/interpret all diagnostic procedures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	1	20.0	25.0	25.0
	Neutral/Acceptable	2	40.0	50.0	75.0
	Strongly Disagree	1	20.0	25.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**q16 Behavioral: Communicate effectively**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	2	40.0	50.0	50.0
	Generally Agree	1	20.0	25.0	75.0
	Strongly Disagree	1	20.0	25.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**q17 Behavioral: Conduct myself in ethical/professional manner**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	2	40.0	50.0	50.0
	Neutral/Acceptable	2	40.0	50.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**q18 Behavioral: Effective time management**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	2	40.0	50.0	50.0
	Neutral/Acceptable	1	20.0	25.0	75.0
	Strongly Disagree	1	20.0	25.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**q19 Behavioral: Encouraged me to apply for/pass CRT exam**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	1	20.0	25.0	25.0
	Generally Agree	2	40.0	50.0	75.0
	Neutral/Acceptable	1	20.0	25.0	100.0
	Total	4	80.0	100.0	
Missing	System	1	20.0		
Total		5	100.0		

**q20 Behavioral: Encouraged me to apply for/pass RRT exam**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	1	20.0	20.0	20.0
	Generally Agree	4	80.0	80.0	100.0
	Total	5	100.0	100.0	

**q21 Have actively pursued NBRC CRT credential**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	5	100.0	100.0	100.0

**q22 Have actively pursued NBRC RRT credential**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	3	60.0	60.0	60.0
	No	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q23 Member of a state respiratory care profes'l assn**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	80.0	80.0	80.0
	No	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q24 Member of Amer Assn for Respiratory Care**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	2	40.0	40.0	40.0
	No	3	60.0	60.0	100.0
	Total	5	100.0	100.0	

**q25 Actively participate in continuing ed activities**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	80.0	80.0	80.0
	No	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q26 If "no" to q21-25, please explain**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	60.0	60.0	60.0
	I haven't taken my RRT; I am studying for that exam.	1	20.0	20.0	80.0
	Need to renew.	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q27 Overall: Academic advising was effective**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	1	20.0	20.0	20.0
	Generally Agree	3	60.0	60.0	80.0
	Neutral/Acceptable	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q28 Overall: Recommend prog to someone considering resp ther**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	2	40.0	40.0	40.0
	Generally Agree	1	20.0	20.0	60.0
	Generally Disagree	1	20.0	20.0	80.0
	Strongly Disagree	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q29 Overall: How easy to find employment in resp therapy field**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Easy to Find	3	60.0	60.0	60.0
	Moderately Easy to Find	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

**q30 Overall quality of program**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Good	3	60.0	60.0	60.0
	Fair	1	20.0	20.0	80.0
	Poor	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q31 Name 2-3 strengths of program**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	40.0	40.0	40.0
	Good work ethic. Confidence.	1	20.0	20.0	60.0
	I learned the most during my 9 wk ICU rotation-vents. ABG is really strong-interperting & drawing.	1	20.0	20.0	80.0
	I recognize equipment.	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q32 2-3 suggestions to strengthen program**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	20.0	20.0	20.0
	Longer NICU & more lab time/class time. Less on-line.	1	20.0	20.0	40.0
	More class time! More time w/ vents. More concepts w/ vents.	1	20.0	20.0	60.0
	Reimburse grads at least 50% of their tuition.	1	20.0	20.0	80.0
	Spend more time teaching basics. More time prep'g for CRT/RRT.	1	20.0	20.0	100.0
	Total	5	100.0	100.0	



**q33 Qualities/skills expected not in program**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	40.0	40.0	40.0
	N/A	2	40.0	40.0	80.0
	Pt assessment & much more.	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**q34 Additional comments**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	20.0	20.0	20.0
	Go over disease process more & signs/symptoms of diseases-not just on-line PowerPoints & book reading.	1	20.0	20.0	40.0
	I believe on-line was not the way to go. I would strongly recommend getting rid of it & having classes from the start.	1	20.0	20.0	60.0
	Turn this into a traditional classroom program.	1	20.0	20.0	80.0
	Very easy to find employment b/c I was already working for the hospital, just in a different position.	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

**Discussion:**

The August 2008 respiratory care graduate exit survey gleaned responses from 5 graduates, all of whom were employed at the time of the survey. 80% of the respondents indicated that they had obtained their Certified Respiratory Therapist credentials. The majority of respondents indicated that their knowledge of respiratory care and general medical knowledge was adequate. This also mirrored the responses for the majority of respondents indicating that their clinical skills, including patient assessment, treatment, and ability to interpret test results was acceptable.

The majority of respondents indicated that they would recommend FSU's respiratory care program to others considering a career in the field. All respondents indicated that finding employment in their profession was easy to moderately easy to find. 60% of respondents indicated that the program quality was very good. A recurring suggestion to strengthen the program was to have more class time, and 2 of 4 respondents suggested that face-to-face rather than online courses would have been beneficial.

The program response was based on the current curriculum and faculty members that are no longer employed at Ferris. Several comments have already been addressed in the new curriculum and with the new faculty members. The chart summarizes the main concerns identified by the graduate survey and the action plan that has been implemented to fix the problem:

<b>Problem Identified</b>	<b>Action Taken</b>
Students suggested More Class Time.	Labs time has been reorganized to facilitate simulation of clinical problems with emphasis on critical thinking and problem solving.

## C. Student Program Evaluation

### Respiratory Care APR...Students...08Su

#### Frequencies

Prepared by: Institutional Research & Testing, 08/08

#### Statistics

	N		Mean	Median	Std. Deviation
	Valid	Missing			
q1a Fac teach effectively in class/online	47	0	3.55	4.00	1.442
q1b Fac teach effectively in lab	47	0	4.23	5.00	1.521
q1c Fac teach effectively in clinical area	47	0	4.57	5.00	1.665
q1d Instruction based on clearly stated objectives	47	0	3.66	4.00	1.403
q1e Fac number is adequate in class/online	47	0	3.87	4.00	1.361
q1f Fac number is adequate in lab	45	2	4.51	5.00	1.308
q1g Fac number is adequate in clinical area	44	3	4.45	5.00	1.649
q1h Fac members have good rapport with students	46	1	3.91	5.00	1.411
q1i Fac are willing to help students with academic needs	45	2	4.09	5.00	1.345
q1j Fac ensure student representation on advisory committee	44	3	4.00	4.00	1.725
q2 Personnel Resources comments	47	0			
q3a Classrooms are adequate in size	46	1	4.57	5.00	1.601
q3b Classrooms have adequate lighting	46	1	5.04	5.00	1.282
q3c Classrooms contain adequate seating	46	1	4.98	5.00	1.341
q3d Classrooms have adequate ventilation	46	1	4.89	5.00	1.386
q3e Classrooms have necessary equipment	46	1	4.26	5.00	1.831
q3f Labs are adequate in size	46	1	4.37	5.00	1.388
q3g Labs have adequate lighting	46	1	4.63	5.00	1.103
q3h Labs contain adequate seating	46	1	4.65	5.00	1.159
q3i Labs have adequate ventilation	45	2	4.71	5.00	1.141
q3j Lab accessible to students outside scheduled class times	46	1	4.02	4.00	1.719
q3k Amount of lab equip is sufficient	46	1	3.57	4.00	1.785
q3l Variety of equipment is sufficient	46	1	3.72	4.00	1.760
q3m Supplies are sufficient	46	1	3.70	4.00	1.750
q3n Lab activ's prepare students	46	1	4.20	5.00	1.668
q3o Lab equip/supplies are supplemented by utilizing clinical affiliates	46	1	4.17	4.00	1.596
q4 Physical Resources comments	47	0			
q5a Prog fac/library personnel offer orientation & demo	45	2	5.00	6.00	1.382
q5b Institutional library personnel provide assistance	45	2	5.16	6.00	1.205
q5c Library hours are convenient	45	2	5.00	6.00	1.348
q5d Libraries provide sufficient materials	45	2	5.02	6.00	1.270
q5e Program assignments require the use of computers	45	2	4.76	5.00	1.111
q5f Prog assmts require library references, journals, etc.	45	2	4.58	5.00	1.196
q5g Tutorial assistance is available when needed	45	2	4.56	5.00	1.531
q5h A/V & computer equipment are available	45	2	4.73	5.00	1.529
q5i Computer resources are adequate	45	2	4.44	5.00	1.486
q5j Institut'l Student Instruct'l Support Svcs are accessible	45	2	4.40	5.00	1.558
q6 Learning Resources comments	47	0			
q7a Clin facils offer sufficient number of procedures	45	2	4.76	5.00	1.246
q7b Clin facils offer sufficient variety of procedures	45	2	4.73	5.00	1.250
q7c Clin facils provide adequate exposure to current equipmnt	45	2	4.71	5.00	1.290
q7d Each clinical rotation is sufficient length	45	2	4.51	5.00	1.456
q7e Clinical rotations provide equivalent experience	44	3	4.11	4.50	1.768
q7f Sufficient class/lab instruction provided prior to clin activ	45	2	4.04	5.00	1.783
q7g Class/lab instruction appropriately sequenced w/ clin instruction	45	2	4.31	5.00	1.676
q7h Students adequately oriented to assigned clin areas/procedures	45	2	4.42	5.00	1.469
q7i Clin instructors are sufficiently knowledgeable	45	2	4.69	5.00	1.328
q7j Clin instructors provide appropriate supervision	45	2	4.56	5.00	1.575
q7k Clin instructors consistent in their evaluation	43	4	4.65	5.00	1.412
q7l Clin instructors readily available	45	2	4.60	5.00	1.558
q7m Clin instructors effective role models	45	2	4.71	5.00	1.254

## Statistics

	N		Mean	Median	Std. Deviation
	Valid	Missing			
q7n Clin instruct's encourage students	45	2	4.69	5.00	1.240
q8 Clinical Resources comments	47	0			
q9a Med Dir & stu interaction contributes to dev'mt	45	2	4.44	5.00	1.423
q9b Phys & stu interaction is sufficient	45	2	4.38	5.00	1.482
q9c Phys interaction is sufficient	45	2	4.38	5.00	1.466
q9d Overall stu interaction with physicians is adequate	45	2	4.31	4.00	1.490
q10 Medical Director/Physician Interaction comments	47	0			
q11 How long been student in the program	47	0			
q12 Rate the overall quality of the resources	44	3	2.77	3.00	1.008
q13 Which resources provided most support	47	0			
q14 Why do you feel those did	47	0			
q15 Which resources could be improved	47	0			
q16 How do you think they could be improved	47	0			
q17 Additional comments/suggestions	47	0			

## Frequency Table

### q1a Fac teach effectively in class/online

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	8	17.0	17.0	17.0
	Somewhat Disagree	4	8.5	8.5	25.5
	Neutral	2	4.3	4.3	29.8
	Somewhat Agree	21	44.7	44.7	74.5
	Strongly Agree	11	23.4	23.4	97.9
	Not Applicable	1	2.1	2.1	100.0
	Total	47	100.0	100.0	

### q1b Fac teach effectively in lab

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	10.6	10.6	10.6
	Somewhat Disagree	3	6.4	6.4	17.0
	Neutral	2	4.3	4.3	21.3
	Somewhat Agree	11	23.4	23.4	44.7
	Strongly Agree	18	38.3	38.3	83.0
	Not Applicable	8	17.0	17.0	100.0
	Total	47	100.0	100.0	

### q1c Fac teach effectively in clinical area

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	12.8	12.8	12.8
	Neutral	4	8.5	8.5	21.3
	Somewhat Agree	6	12.8	12.8	34.0
	Strongly Agree	13	27.7	27.7	61.7
	Not Applicable	18	38.3	38.3	100.0
	Total	47	100.0	100.0	

### q1d Instruction based on clearly stated objectives

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	7	14.9	14.9	14.9
	Somewhat Disagree	3	6.4	6.4	21.3
	Neutral	5	10.6	10.6	31.9
	Somewhat Agree	16	34.0	34.0	66.0
	Strongly Agree	16	34.0	34.0	100.0
	Total	47	100.0	100.0	

**q1e Fac number is adequate in class/online**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	8.5	8.5	8.5
	Somewhat Disagree	5	10.6	10.6	19.1
	Neutral	5	10.6	10.6	29.8
	Somewhat Agree	14	29.8	29.8	59.6
	Strongly Agree	17	36.2	36.2	95.7
	Not Applicable	2	4.3	4.3	100.0
	Total	47	100.0	100.0	

**q1f Fac number is adequate in lab**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.3	4.4	4.4
	Somewhat Disagree	3	6.4	6.7	11.1
	Neutral	2	4.3	4.4	15.6
	Somewhat Agree	10	21.3	22.2	37.8
	Strongly Agree	19	40.4	42.2	80.0
	Not Applicable	9	19.1	20.0	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q1g Fac number is adequate in clinical area**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	8.5	9.1	9.1
	Somewhat Disagree	4	8.5	9.1	18.2
	Neutral	3	6.4	6.8	25.0
	Somewhat Agree	4	8.5	9.1	34.1
	Strongly Agree	15	31.9	34.1	68.2
	Not Applicable	14	29.8	31.8	100.0
	Total	44	93.6	100.0	
Missing	System	3	6.4		
Total		47	100.0		

**q1h Fac members have good rapport with students**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	10.6	10.9	10.9
	Somewhat Disagree	3	6.4	6.5	17.4
	Neutral	8	17.0	17.4	34.8
	Somewhat Agree	5	10.6	10.9	45.7
	Strongly Agree	25	53.2	54.3	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

**q1i Fac are willing to help students with academic needs**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	8.5	8.9	8.9
	Somewhat Disagree	2	4.3	4.4	13.3
	Neutral	6	12.8	13.3	26.7
	Somewhat Agree	9	19.1	20.0	46.7
	Strongly Agree	22	46.8	48.9	95.6
	Not Applicable	2	4.3	4.4	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q1j Fac ensure student representation on advisory committee**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	12.8	13.6	13.6
	Somewhat Disagree	1	2.1	2.3	15.9
	Neutral	13	27.7	29.5	45.5
	Somewhat Agree	3	6.4	6.8	52.3
	Strongly Agree	9	19.1	20.5	72.7
	Not Applicable	12	25.5	27.3	100.0
	Total	44	93.6	100.0	
Missing	System	3	6.4		
Total		47	100.0		

**q2 Personnel Resources comments**

		Frequency	Percent	Valid Percent	Cumulative Percent
		28	59.6	59.6	59.6
Valid	CCHS 101 was well organized, lots of communication, very clear objectives. I did not feel this way about any of my RESP courses this term: 100, 119, and 121. I missed the first quiz for all these classes because I was so confused on what to even do or where to start, there was no communication in the beginning, and no real objectives, most things were only available after the beginning of the term. There was a large learning curve at the beginning which was difficult. Also, many test questions were incorrect and materials dated. I felt with better leadership, communication and clear objectives this would have been a much better learning environment.	1	2.1	2.1	61.7
	For the lab setting, I would find it more beneficial to have a section of the time dedicated to direct teaching. I feel that a more sophisticated computer program could replace the online instructors. All they do is act like a glorified secretary. They do no teaching whatsoever so I feel it is pointless to have them. These comments come from a very high achieving student who already has a Bachelor's degree. I tell students who ask me about this program if you can teach yourself math and science material out of a textbook then this program is for you. If you actually need instruction find a different program, because this program has no direct teaching (even in the lab setting).	1	2.1	2.1	63.8
	Gary Jeromin is an over the top professor! He is great with the students, he is like a live book of knowledge!! I feel very privileged to have him as my advisor/professor. He is always more than willing to sit down with you and explain things to you and is very understanding when personal situations arise. Gary is a GREAT teacher!	1	2.1	2.1	66.0
	I've had a great experience with all my online teachers so far. I only wish we could've had one of them come up to do clinicals, or at least an actual TEACHER.	1	2.1	2.1	68.1
	I don't have any problems with the faculty. I just wished I had a chance to get to know them better than online conversation.	1	2.1	2.1	70.2
	I feel that all the program faculty have done an outstanding job. However, at this point in the program there are some details of reorganization still getting "tweaked" that have caused some confusion on the part of students as to what is expected from an academic standpoint in the classroom.	1	2.1	2.1	72.3

**q3a Classrooms are adequate in size**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	6.4	6.5	6.5
	Somewhat Disagree	3	6.4	6.5	13.0
	Neutral	6	12.8	13.0	26.1
	Somewhat Agree	6	12.8	13.0	39.1
	Strongly Agree	9	19.1	19.6	58.7
	Not Applicable	19	40.4	41.3	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

**q3b Classrooms have adequate lighting**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.3	4.3	4.3
	Neutral	4	8.5	8.7	13.0
	Somewhat Agree	4	8.5	8.7	21.7
	Strongly Agree	14	29.8	30.4	52.2
	Not Applicable	22	46.8	47.8	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

**q3c Classrooms contain adequate seating**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.3	4.3	4.3
	Somewhat Disagree	1	2.1	2.2	6.5
	Neutral	3	6.4	6.5	13.0
	Somewhat Agree	6	12.8	13.0	26.1
	Strongly Agree	12	25.5	26.1	52.2
	Not Applicable	22	46.8	47.8	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		



**q3d Classrooms have adequate ventilation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.3	4.3	4.3
	Somewhat Disagree	1	2.1	2.2	6.5
	Neutral	5	10.6	10.9	17.4
	Somewhat Agree	5	10.6	10.9	28.3
	Strongly Agree	12	25.5	26.1	54.3
	Not Applicable	21	44.7	45.7	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

**q3e Classrooms have necessary equipment**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	12.8	13.0	13.0
	Somewhat Disagree	4	8.5	8.7	21.7
	Neutral	5	10.6	10.9	32.6
	Somewhat Agree	6	12.8	13.0	45.7
	Strongly Agree	7	14.9	15.2	60.9
	Not Applicable	18	38.3	39.1	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

**q3f Labs are adequate in size**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	6.4	6.5	6.5
	Somewhat Disagree	1	2.1	2.2	8.7
	Neutral	7	14.9	15.2	23.9
	Somewhat Agree	10	21.3	21.7	45.7
	Strongly Agree	15	31.9	32.6	78.3
	Not Applicable	10	21.3	21.7	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

**q3g Labs have adequate lighting**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.1	2.2	2.2
	Neutral	6	12.8	13.0	15.2
	Somewhat Agree	11	23.4	23.9	39.1
	Strongly Agree	18	38.3	39.1	78.3
	Not Applicable	10	21.3	21.7	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

**q3h Labs contain adequate seating**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.1	2.2	2.2
	Somewhat Disagree	2	4.3	4.3	6.5
	Neutral	3	6.4	6.5	13.0
	Somewhat Agree	10	21.3	21.7	34.8
	Strongly Agree	20	42.6	43.5	78.3
	Not Applicable	10	21.3	21.7	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

**q3i Labs have adequate ventilation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.1	2.2	2.2
	Somewhat Disagree	1	2.1	2.2	4.4
	Neutral	4	8.5	8.9	13.3
	Somewhat Agree	9	19.1	20.0	33.3
	Strongly Agree	19	40.4	42.2	75.6
	Not Applicable	11	23.4	24.4	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q3j Lab accessible to students outside scheduled class times**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	12.8	13.0	13.0
	Somewhat Disagree	4	8.5	8.7	21.7
	Neutral	6	12.8	13.0	34.8
	Somewhat Agree	9	19.1	19.6	54.3
	Strongly Agree	9	19.1	19.6	73.9
	Not Applicable	12	25.5	26.1	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

**q3k Amount of lab equip is sufficient**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	7	14.9	15.2	15.2
	Somewhat Disagree	10	21.3	21.7	37.0
	Neutral	4	8.5	8.7	45.7
	Somewhat Agree	10	21.3	21.7	67.4
	Strongly Agree	5	10.6	10.9	78.3
	Not Applicable	10	21.3	21.7	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

**q3l Variety of equipment is sufficient**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	12.8	13.0	13.0
	Somewhat Disagree	9	19.1	19.6	32.6
	Neutral	5	10.6	10.9	43.5
	Somewhat Agree	8	17.0	17.4	60.9
	Strongly Agree	8	17.0	17.4	78.3
	Not Applicable	10	21.3	21.7	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

**q3m Supplies are sufficient**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	12.8	13.0	13.0
	Somewhat Disagree	9	19.1	19.6	32.6
	Neutral	5	10.6	10.9	43.5
	Somewhat Agree	9	19.1	19.6	63.0
	Strongly Agree	7	14.9	15.2	78.3
	Not Applicable	10	21.3	21.7	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

**q3n Lab activities prepare students to perform effectively in clinical setting**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	10.6	10.9	10.9
	Somewhat Disagree	4	8.5	8.7	19.6
	Neutral	5	10.6	10.9	30.4
	Somewhat Agree	7	14.9	15.2	45.7
	Strongly Agree	13	27.7	28.3	73.9
	Not Applicable	12	25.5	26.1	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

**q3o Lab equip/supplies are supplemented by utilizing clinical affiliates**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	6.4	6.5	6.5
	Somewhat Disagree	6	12.8	13.0	19.6
	Neutral	5	10.6	10.9	30.4
	Somewhat Agree	11	23.4	23.9	54.3
	Strongly Agree	8	17.0	17.4	71.7
	Not Applicable	13	27.7	28.3	100.0
	Total	46	97.9	100.0	
Missing	System	1	2.1		
Total		47	100.0		

#### q4 Physical Resources comments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		29	61.7	61.7	61.7
	All classes were online.	1	2.1	2.1	63.8
	Being online students, we have had minimal lab equipment to perform lab exercises. Luckily we are a small lab and it is understandable that we have to share equipment with other labs in session.	1	2.1	2.1	66.0
	I am not going to comment on this section, because all of my labs were held in a host hospital not an FSU facility. The only equipment that we received from Ferris was a box of used nebs and blue tubing with some blood on it (from Dave Zobeck). Class size was too big.	1	2.1	2.1	68.1
	I feel many of the items that we had check offs on did not work at all or properly. We had to "visualize" how it would work in a everyday hospital setting.	1	2.1	2.1	70.2
	I feel that the physical resources are very limited. This past semester we were without an EKG machine so we had to practice with red dots. Knowing how to do an EKG is an essential function that we need to know and I feel that we should have the appropriate equipment. Some of the material is outdated and I feel that we should have the more up to date stuff seeing as that is what we are going to use. Thanks to Gary he has now organized our lab. Previous instructors left the lab a mess and very unorganized and hard to find anything which takes up class time which in the end conflicts with our learning.	1	2.1	2.1	72.3
	I have no real problem with the lab setting. I feel that the online data is still in transition for my program and is undergoing change. Too bad I am in the middle and always have to wonder what powerpoint is on the test. The info is good, just disorganized. As a whole, our lab class is very patient and our instructor is very good. She is not the problem at all.	1	2.1	2.1	74.5
	I have not experienced lab at Ferris/Sparrow Hospital yet.	1	2.1	2.1	76.6
	I wish there were more hands on tools available. I wish we had more time to play with vents and neo equipment before clinicals.	1	2.1	2.1	78.7
	I wish we could have more equipment to work with so there's not so many of us standing around waiting. We could get a lot more practice in that way.	1	2.1	2.1	80.9
	In our lab, the info is explained to us on the first day and we, the students, rely on each other for other info and tutorial.	1	2.1	2.1	83.0
	It's kind of silly that we have to share equipment with other cohorts. For example, the EKG machine was not available when we went over that chapter in our book or during our lab time so we didn't learn how to use the machine; we just used red stickers to learn the placement.	1	2.1	2.1	85.1
	Labs are extremely helpful in the hands on learning and have helped greatly with my clinical experience.	1	2.1	2.1	87.2
	N/A	1	2.1	2.1	89.4
	Need more lab equipment. Difficult to become familiar and adept with equipment when sharing one machine with 12-15 others.	1	2.1	2.1	91.5
	None	1	2.1	2.1	93.6
	Some of the material we had did not function properly and made it difficult when we got to the clinical setting (at least for me) and other equipment was broken or missing. It made it hard to pretend then try and do the checkoff in clinicals.	1	2.1	2.1	95.7
There are very few resources in the two years here.	1	2.1	2.1	97.9	

**q4 Physical Resources comments**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	We have no classroom so we have to "fly solo" most of the time. The only time we get real education that makes sense is at labs. HANDS ON!!! I've retained more information from labs and clinics than I ever will from what I call " CD time." Mainly because it makes more sense when you can see it and touch it.	1	2.1	2.1	100.0
Total		47	100.0	100.0	

**q5a Prog fac/library personnel offer orientation & demo**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.1	2.2	2.2
	Neutral	9	19.1	20.0	22.2
	Somewhat Agree	5	10.6	11.1	33.3
	Strongly Agree	3	6.4	6.7	40.0
	Not Applicable	27	57.4	60.0	100.0
Total		45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q5b Institutional library personnel provide assistance**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	8	17.0	17.8	17.8
	Somewhat Agree	5	10.6	11.1	28.9
	Strongly Agree	4	8.5	8.9	37.8
	Not Applicable	28	59.6	62.2	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q5c Library hours are convenient**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.1	2.2	2.2
	Neutral	8	17.0	17.8	20.0
	Somewhat Agree	6	12.8	13.3	33.3
	Strongly Agree	4	8.5	8.9	42.2
	Not Applicable	26	55.3	57.8	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q5d Libraries provide sufficient materials**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Disagree	1	2.1	2.2	2.2
	Neutral	8	17.0	17.8	20.0
	Somewhat Agree	5	10.6	11.1	31.1
	Strongly Agree	6	12.8	13.3	44.4
	Not Applicable	25	53.2	55.6	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q5e Program assignments require the use of computers**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.1	2.2	2.2
	Somewhat Disagree	1	2.1	2.2	4.4
	Neutral	5	10.6	11.1	15.6
	Somewhat Agree	3	6.4	6.7	22.2
	Strongly Agree	26	55.3	57.8	80.0
	Not Applicable	9	19.1	20.0	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q5f Prog assmts require library references, journals, etc.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Disagree	1	2.1	2.2	2.2
	Neutral	11	23.4	24.4	26.7
	Somewhat Agree	6	12.8	13.3	40.0
	Strongly Agree	15	31.9	33.3	73.3
	Not Applicable	12	25.5	26.7	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q5g Tutorial assistance is available when needed**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.3	4.4	4.4
	Somewhat Disagree	1	2.1	2.2	6.7
	Neutral	12	25.5	26.7	33.3
	Somewhat Agree	4	8.5	8.9	42.2
	Strongly Agree	7	14.9	15.6	57.8
	Not Applicable	19	40.4	42.2	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q5h A/V & computer equipment are available**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.3	4.4	4.4
	Somewhat Disagree	1	2.1	2.2	6.7
	Neutral	10	21.3	22.2	28.9
	Somewhat Agree	3	6.4	6.7	35.6
	Strongly Agree	7	14.9	15.6	51.1
	Not Applicable	22	46.8	48.9	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q5i Computer resources are adequate**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.3	4.4	4.4
	Somewhat Disagree	1	2.1	2.2	6.7
	Neutral	12	25.5	26.7	33.3
	Somewhat Agree	6	12.8	13.3	46.7
	Strongly Agree	8	17.0	17.8	64.4
	Not Applicable	16	34.0	35.6	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		



**q5j Institut'l Student Instruct'l Support Svcs are accessible**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.3	4.4	4.4
	Somewhat Disagree	3	6.4	6.7	11.1
	Neutral	10	21.3	22.2	33.3
	Somewhat Agree	7	14.9	15.6	48.9
	Strongly Agree	6	12.8	13.3	62.2
	Not Applicable	17	36.2	37.8	100.0
Total		45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q6 Learning Resources comments**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		38	80.9	80.9	80.9
	I have had only one encounter with FLITE and it was very positive.	1	2.1	2.1	83.0
	I take online classes so I never use the library.	1	2.1	2.1	85.1
	I use my home computer, so I guess it works fine.	1	2.1	2.1	87.2
	Just a note on the summer schedule, tests and time to achieve our goals. It has not ended up as we as a class assumed. The tests are numerous at the end and because of the short semester, have unrealistically caught up in the end. Again, we are not low achieving students that feel this way. It feels out of control and that we are the only ones that see it. What happened here?	1	2.1	2.1	89.4
	Loved the CDs plus undated powerpoints given. It has been nice to have many different resources.	1	2.1	2.1	91.5
	N/A	1	2.1	2.1	93.6
	None of these questions apply to distance learning. I did not set foot on campus. There are quite a few of the students that will get their degree distance learning.	1	2.1	2.1	95.7
	Online student, not near campus.	1	2.1	2.1	97.9
	We do all learning off the CDs (which are the greatest-I really appreciate them a lot), so we do not utilize the library. But do use a dictionary, web, PDR, etc. from time to time to complete assignments.	1	2.1	2.1	100.0
Total	47	100.0	100.0		

**q7a Clin facils offer sufficient number of procedures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.3	4.4	4.4
	Neutral	3	6.4	6.7	11.1
	Somewhat Agree	12	25.5	26.7	37.8
	Strongly Agree	13	27.7	28.9	66.7
	Not Applicable	15	31.9	33.3	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q7e Clinical rotations provide equivalent experience**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	12.8	13.6	13.6
	Somewhat Disagree	2	4.3	4.5	18.2
	Neutral	9	19.1	20.5	38.6
	Somewhat Agree	5	10.6	11.4	50.0
	Strongly Agree	8	17.0	18.2	68.2
	Not Applicable	14	29.8	31.8	100.0
	Total	44	93.6	100.0	
Missing	System	3	6.4		
Total		47	100.0		

**q7f Sufficient class/lab instruction provided prior to clin activ**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	10.6	11.1	11.1
	Somewhat Disagree	7	14.9	15.6	26.7
	Neutral	5	10.6	11.1	37.8
	Somewhat Agree	5	10.6	11.1	48.9
	Strongly Agree	10	21.3	22.2	71.1
	Not Applicable	13	27.7	28.9	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q7g Class/lab instruction appropriately sequenced w/ clin instruction**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	10.6	11.1	11.1
	Somewhat Disagree	1	2.1	2.2	13.3
	Neutral	9	19.1	20.0	33.3
	Somewhat Agree	5	10.6	11.1	44.4
	Strongly Agree	10	21.3	22.2	66.7
	Not Applicable	15	31.9	33.3	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q7h Students adequately oriented to assigned clin areas/procedures**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	6.4	6.7	6.7
	Neutral	10	21.3	22.2	28.9
	Somewhat Agree	8	17.0	17.8	46.7
	Strongly Agree	10	21.3	22.2	68.9
	Not Applicable	14	29.8	31.1	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q7i Clin instructors are sufficiently knowledgeable**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Disagree	5	10.6	11.1	11.1
	Neutral	4	8.5	8.9	20.0
	Somewhat Agree	6	12.8	13.3	33.3
	Strongly Agree	15	31.9	33.3	66.7
	Not Applicable	15	31.9	33.3	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q7j Clin instructors provide appropriate supervision**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	8.5	8.9	8.9
	Somewhat Disagree	2	4.3	4.4	13.3
	Neutral	3	6.4	6.7	20.0
	Somewhat Agree	8	17.0	17.8	37.8
	Strongly Agree	12	25.5	26.7	64.4
	Not Applicable	16	34.0	35.6	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q7k Clin instructors consistent in their evaluation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	4.3	4.7	4.7
	Somewhat Disagree	1	2.1	2.3	7.0
	Neutral	6	12.8	14.0	20.9
	Somewhat Agree	8	17.0	18.6	39.5
	Strongly Agree	10	21.3	23.3	62.8
	Not Applicable	16	34.0	37.2	100.0
	Total	43	91.5	100.0	
Missing	System	4	8.5		
Total		47	100.0		

**q7l Clin instructors readily available**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	10.6	11.1	11.1
	Neutral	2	4.3	4.4	15.6
	Somewhat Agree	10	21.3	22.2	37.8
	Strongly Agree	12	25.5	26.7	64.4
	Not Applicable	16	34.0	35.6	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q7m Clin instructors effective role models**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.1	2.2	2.2
	Somewhat Disagree	1	2.1	2.2	4.4
	Neutral	6	12.8	13.3	17.8
	Somewhat Agree	9	19.1	20.0	37.8
	Strongly Agree	13	27.7	28.9	66.7
	Not Applicable	15	31.9	33.3	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q7n Clin instructors encourage students to think/solve clin problems**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.1	2.2	2.2
	Somewhat Disagree	1	2.1	2.2	4.4
	Neutral	5	10.6	11.1	15.6
	Somewhat Agree	12	25.5	26.7	42.2
	Strongly Agree	11	23.4	24.4	66.7
	Not Applicable	15	31.9	33.3	100.0
Total		45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q8 Clinical Resources comments**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		28	59.6	59.6	59.6
	1st semester, no clinicals.	1	2.1	2.1	61.7
	Had neo class one year before clinicals...too spread out. The ventilator class is grossly inadequate. In my opinion, this whole program needs to be re-addressed. Perhaps credentialing for the university should be suspended until the shortcomings have been corrected. I am not telling you anything you don't already know, you just don't listen or refuse to act. (I am not sure which, and frankly, it's not my issue anymore.) Clinical site for questions above refers to host hospital not FSU facility.	1	2.1	2.1	63.8
	Have not started clinicals yet, so most of these questions do not pertain to me at this time.	1	2.1	2.1	66.0
	How can we even evaluate these questions accurately? We didn't even have an orientation PERIOD! I know for a fact that SOME students had an orientation at their assigned clinical site....SOME of us didn't. Why is this allowed to happen? There doesn't seem to be any rhyme or reason to many aspects of this program. We were told that we would all have orientation at our sites. Well, that wasn't true. I feel as though I am begging for direction and no one will answer!	1	2.1	2.1	68.1
	I absolutely love the clinical site where I am and have been introduced to many new things we didn't cover in lab yet. Everyone I work with is very patient and willing to teach.	1	2.1	2.1	70.2
	I am enjoying my clinical very much and would like to actually be in a clinical setting at least once or twice a week year round to stay in the hospital setting. I think that would be a great advantage to our class as a whole.	1	2.1	2.1	72.3
	I have not had any clinical experiences.	1	2.1	2.1	74.5
	I wish we had a few more clinicals or longer rotations to learn more of home care and a long term facility.	1	2.1	2.1	76.6
	Much inconsistency...again possibly due to reorganization of this program at this time?	1	2.1	2.1	78.7
	My neonatal clinical experience in Hurley Medical Center, Flint was excellent!	1	2.1	2.1	80.9
	N/A	1	2.1	2.1	83.0
	None	1	2.1	2.1	85.1
	Not there yet.	1	2.1	2.1	87.2

**q8 Clinical Resources comments**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Some clinical instructors pick and choose the students they would help or ignore. I have seen one student literally blackballed from any help or advising of what to do to accomplish her clinical rotation. This unsavory behavior should not be tolerated. It should be addressed immediately and severley punished, but I have no doubt that this will never happen.	1	2.1	2.1	89.4
	The clinical instructor visits once during clinic. If these questions regarding clinic instructor are in reference to the employee of the hospital that is allowing us to perform under them then yes they are very helpful and willing to help us in any way they can be it them answering our questions or them asking us questions. I am very glad I was placed where I was.	1	2.1	2.1	91.5
	The clinical site that I was at was absolutely WONDERFUL! All staff members were great and very knowledgeable and they were more than willing to teach anything that I wanted or needed to know. Would recommend!	1	2.1	2.1	93.6
	The hospital was very up to date. I actually felt like I learned alot. Everything that I learned in the classroom made sense when I went to clinicals!	1	2.1	2.1	95.7
	There is way too much pressure put on performing tasks that may not be used at the clinical site. We will still be responsible for them come the next clinic. For example, I can teach a monkey to use a flutter valve or an acapella device, or MDI/DPI within a few minutes, but my clinical site doesn't offer some those tools. I personally think more attention should be paid to the more critical aspects of this profession. The next clinic is just that. We shouldn't have to spend valuable time away from the real "life saving" learning oportunities to make up for less critical procedures. "Heck", a nurse could teach a patient that. They already intervienue on I.S. and O2 titration.	1	2.1	2.1	97.9
	While at our clinic sites we had proctors who worked in those institutions, but no clinical instructors are on site. I can understand this because of the number of sites and students, but for some of my fellow students this was a big obstacle to their success.	1	2.1	2.1	100.0
	Total	47	100.0	100.0	

**q9a Med Dir & student interaction contributes to dev'mt of effective comm skills**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	2.1	2.2	2.2
	Somewhat Disagree	1	2.1	2.2	4.4
	Neutral	15	31.9	33.3	37.8
	Somewhat Agree	3	6.4	6.7	44.4
	Strongly Agree	10	21.3	22.2	66.7
	Not Applicable	15	31.9	33.3	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q9b Physician & stu interaction is sufficient to facilitate dev'mt of effective comm skills**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Disagree	7	14.9	15.6	15.6
	Neutral	7	14.9	15.6	31.1
	Somewhat Agree	8	17.0	17.8	48.9
	Strongly Agree	8	17.0	17.8	66.7
	Not Applicable	15	31.9	33.3	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q9c Physician interaction is sufficient to provide stu w/ physician perspective of pt care**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Disagree	6	12.8	13.3	13.3
	Neutral	9	19.1	20.0	33.3
	Somewhat Agree	7	14.9	15.6	48.9
	Strongly Agree	8	17.0	17.8	66.7
	Not Applicable	15	31.9	33.3	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q9d Overall stu interaction with physicians is adequate**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat Disagree	6	12.8	13.3	13.3
	Neutral	11	23.4	24.4	37.8
	Somewhat Agree	6	12.8	13.3	51.1
	Strongly Agree	7	14.9	15.6	66.7
	Not Applicable	15	31.9	33.3	100.0
	Total	45	95.7	100.0	
Missing	System	2	4.3		
Total		47	100.0		

**q10 Medical Director/Physician Interaction comments**

	Frequency	Percent	Valid Percent	Cumulative Percent	
	31	66.0	66.0	66.0	
Valid	Again, how can I answer these appropriately when we weren't given adequate instruction about what was expected of us. Also, the fact that our lab instructor cares more about getting out of lab early every weekend directly affects our ability to have an intellectual conversation with a physician. Also, our checkoffs were nothing more than skimmed over by our instructor!! Not once did we have to go through our checkoffs step-by-step! How is that preparing us for clinicals? I think it's more of an issue to have SOMEONE, no matter what their qualifications as a teacher may be, than an issue of actually teaching what we are entitled to learn. We are paying for this program. I know for a fact that this is not the way the respiratory students in Big Rapids are treated. There are serious problems with this program.	1	2.1	2.1	68.1
	Because I work at the clinic site I have a relationship already and could talk with the physicians as needed. The rest of the students have to depend on being aggressive in seeking out communication with physicians. I don't think the physicians are aware of the students' needs unless you bring it up.	1	2.1	2.1	70.2
	I don't believe that physician contact is as important as contact is as important as people make it sound. Yes, it's beneficial in some ways, but there are way more important things that the time could be used for.	1	2.1	2.1	72.3
	I don't see how medical directors can help us when we are not even introduced to them. Physicians should be informed that there are students around and that they must if not oblige to interact at least for a period of time with students especially a Pulmonologist otherwise these questions are all irrelevant. Students have a hard time running after doctors trying to squeeze in sometimes feeling unsatisfied.	1	2.1	2.1	74.5
	I had great contact with several physicians through the course of my clinical. They seemed very impressed with my professionalism and knowledge. FSU has done a very good job in this aspect of the course. Credit is due mainly to my lab instructor, he makes it real.	1	2.1	2.1	76.6
	Interaction was hard because they are constantly needed somewhere more important.	1	2.1	2.1	78.7
	N/A	1	2.1	2.1	80.9
	No experience.	1	2.1	2.1	83.0
	No interactions yet.	1	2.1	2.1	85.1
	Same as above.	1	2.1	2.1	87.2
	Sometimes you get a dr. that is so busy you just feel like you are in their way as a student. At that point you just feel like not asking them any questions. They do a great job, they are just busy, and we are just students. At that point I feel like it's better to ask the person you are following that day or night.	1	2.1	2.1	89.4
	The drs are very busy and most of the time very friendly, but the truth is they don't have the time to stop and talk to every student along the way so subsequently they don't have much time for any. A meeting would have to be scheduled and time is money for them!!	1	2.1	2.1	91.5
	The only time I've spent with the physician is during rounds.	1	2.1	2.1	93.6
	The physicians that I worked with were AWESOME! All of them were more than willing to help out and teach. I actually had more than one physician sit down with me and take the time to explain procedures to me. It was very comforting!	1	2.1	2.1	95.7



**q10 Medical Director/Physician Interaction comments**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	This had nothing to do with Ferris and everything to do with the clinical facility. So don't take it as a compliment.	1	2.1	2.1	97.9
	Was great, enhance my knowledge, learn new things.	1	2.1	2.1	100.0
	Total	47	100.0	100.0	

**q11 How long been student in the program**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	4.3	4.3	4.3
	1 semester	1	2.1	2.1	6.4
	1 year	13	27.7	27.7	34.0
	1.5 years	1	2.1	2.1	36.2
	19 months	1	2.1	2.1	38.3
	1year	1	2.1	2.1	40.4
	2	1	2.1	2.1	42.6
	2 semesters	6	12.8	12.8	55.3
	2 years-I graduate in 2 weeks.	1	2.1	2.1	57.4
	2 years	11	23.4	23.4	80.9
	3 semesters	1	2.1	2.1	83.0
	5/20/08	1	2.1	2.1	85.1
	7 months	1	2.1	2.1	87.2
	I am entering my 2nd year.	1	2.1	2.1	89.4
	Over a year	1	2.1	2.1	91.5
	Since May 2008	1	2.1	2.1	93.6
	This is my 1st semester.	3	6.4	6.4	100.0
Total	47	100.0	100.0		

**q12 Rate the overall quality of the resources**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	7	14.9	15.9	15.9
	Fair	7	14.9	15.9	31.8
	Good	19	40.4	43.2	75.0
	Very good	11	23.4	25.0	100.0
	Total	44	93.6	100.0	
Missing	System	3	6.4		
Total		47	100.0		

**q13 Which resources provided most support**

		Frequency	Percent	Valid Percent	Cumulative Percent
		18	38.3	38.3	38.3
	All the FSU instructors are extremely helpful and respond to emails in an appropriate time.	1	2.1	2.1	40.4
	Clinical rounds	1	2.1	2.1	42.6
	Clinicals & lab time.	1	2.1	2.1	44.7
	E-mail with the teachers and the equipment that we learn hands on in lab.	1	2.1	2.1	46.8
	I find support almost anywhere I go or call. I have just found over the years (I have been here a total of 4 years) that I usually get a different answer every time I talk to someone different. There have been plenty of times that I have gotten a different answer from different people, and sometimes it gets aggravating. When it falls back on myself, and it makes me look like I have done something wrong, that's what gets to me. I have only done what I have been told. Everyone does their job well, it's just that one correct answer would help out, so I don't have to guess which answer is the correct one.	1	2.1	2.1	48.9
	I liked that we are going to in classroom settings rather than online because after this summer I have no idea how I could have done it all online!	1	2.1	2.1	51.1
	Instructors.	1	2.1	2.1	53.2
	Lab, classes they all helped me.	1	2.1	2.1	55.3
	LAB, LAB and LAB. This is the only reason I gave the previous question a good rating. I realize that book learning and hands on experience go hand-in-hand, but I think in this profession needs more hands on training from practicing RTs would be more effective. The way it stands right now, we will not be 100% ready to perform our duties after graduation. The cert. tests do not test our actual physical abilities, only our knowledge and multi-level thinking skills.	1	2.1	2.1	57.4
Valid	Labs give more hands on and better understanding. Also the CDs are a big help.	1	2.1	2.1	59.6
	Labs.	1	2.1	2.1	61.7
	My adviser and even she was pretty weak when it came to answering questions.	1	2.1	2.1	63.8
	My adviser and instructor Annette Strader was very supportive of classroom and lab work. She was quick to respond to e-mails and was positive in her comments.	1	2.1	2.1	66.0
	My host hospital.	1	2.1	2.1	68.1
	My instructors and WebCt provided the most support. Without either of these two things it would have been hard to accomplish my goals.	1	2.1	2.1	70.2
	N/A	1	2.1	2.1	72.3
	Nancy Alles the secretary. Things are very unorganized and it had been a battle to try to get simple things answered.	1	2.1	2.1	74.5
	None	1	2.1	2.1	76.6
	PowerPoints with the audio-it's nice to hear a voice, plus sometimes the instructor will add or clarify something.	1	2.1	2.1	78.7
	The CDs are supportive only if they match the questions on the test. A lot of times the test questions are from the next lesson that we will be studying. Most of the time the instructor is willing to understand that the question we got wrong was because it wasn't from the lesson we just studied.	1	2.1	2.1	80.9

**q13 Which resources provided most support**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	The in class lectures.	1	2.1	2.1	83.0
	The instructors, they are awesome and fun, and always there if you need them.	1	2.1	2.1	85.1
	The knowledge of my teachers and as well my clinical sites. The teachers work well with the limited resources that they have, but we do have a bit of limited supplies.	1	2.1	2.1	87.2
	The labs, CDs, instructors that actually see us at labs, and most of all the clinicals support us the greatest.	1	2.1	2.1	89.4
	The newer online powerpoints. The CDs had a lot of older material which RTs do not use anymore. For each topic the professor would spend many hours updating and putting the new powerpoint online.	1	2.1	2.1	91.5
	The slide shows created by David Zobeck were wonderful. Very detailed and easy to listen to, somewhat enjoyable. I found the other slides in RESP 119 to be quite dull, information on slides was not discussed in the audio portion, somewhat difficult to understand. Materials from books, study guides were essential and easily understood as well. Flashcards for gas laws and such would be nice.	1	2.1	2.1	93.6
	The textbooks.	1	2.1	2.1	95.7
	Todd Cross, lab instructor has been wonderful in making sure we have all the knowledge needed for clinical rotation.	1	2.1	2.1	97.9
	Weekend labs during our first semester.....Annette Straeder did an excellent job teaching them!	1	2.1	2.1	100.0
	Total	47	100.0	100.0	

**q14 Why do you feel those did**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		22	46.8	46.8	46.8
	Because I felt that they were always the most consistent and up to date.	1	2.1	2.1	48.9
	Because support or structure from Ferris is grossly inasequate.	1	2.1	2.1	51.1
	Hands on experience.	1	2.1	2.1	53.2
	Helped me understand what am I doing in this program.	1	2.1	2.1	55.3
	Her character and experience in the field.	1	2.1	2.1	57.4
	I am a hands on learner and having the equipment there to actually use and to actually operate helps me learn.	1	2.1	2.1	59.6
	I learned the most at my clinical site	1	2.1	2.1	61.7
	I think that Anne Deming from Dickinson Memorial should be sought after to come to Bay de Noc Community College to instruct labs. She stated that she had put her name in at one time but was never contacted. She is very good at what she does and very informative.	1	2.1	2.1	63.8
	If we had questions right away when learning the material, we could have them answered by the professor right then versus online when learning you can't get an answer right away if a question comes up.	1	2.1	2.1	66.0
	It's the only human one on one support that we get. When a book doesn't make any sense to me I need a professional to explain it to me in human terms. My lab instructor is AWESOME at that. I've learned more real knowledge from him than on those CDs.	1	2.1	2.1	68.1

**q14 Why do you feel those did**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	N/A	1	2.1	2.1	70.2
	None	1	2.1	2.1	72.3
	Reason stated above.	1	2.1	2.1	74.5
	Russ Walsteadt has been very supportive in clinical rotation.	1	2.1	2.1	76.6
	Same as above.	1	2.1	2.1	78.7
	She knows all the questions about the program.	1	2.1	2.1	80.9
	She was a good teacher. Easy to ask her questions. She also went through the checkoffs step-by-step. It forced us to know the procedures very well.	1	2.1	2.1	83.0
	She was the only person who would reply in a timely and appropriate manner.	1	2.1	2.1	85.1
	That's where I learned the most-with hands-on experience.	1	2.1	2.1	87.2
	The slides gave me much support because its still nice to hear someone speak on a subject even in an online learning environment. To hear from someone in the field's explanation of a topic can sometimes clear up what a book cannot.	1	2.1	2.1	89.4
	They are always willing to help and never make us feel like we're not "real" students just because we're online.	1	2.1	2.1	91.5
	They are the only things we have to turn to when trouble strikes. We feel that FSU as a whole does not care about us up here in Escanaba because they do not know us at all or ever for that matter even met us. There needs to be more personability between the faculty at FSU and its cohort students. (We pay the same tuition ya know) Just want FSU to care about us and that's not meant in a cry baby whine ass way whatsoever.	1	2.1	2.1	93.6
	They help in a very timely manner, whenever I had a question or needed help.	1	2.1	2.1	95.7
	They weren't just instructors but also friends.	1	2.1	2.1	97.9
	WebCt is so user friendly compared to other online classes that I have had at other institutions. The instructor made corrections and provided positive input when needed.	1	2.1	2.1	100.0
Total	47	100.0	100.0		

**q15 Which resources could be improved**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		16	34.0	34.0	34.0
	?	1	2.1	2.1	36.2
	All, especially the administrative part of the program.	1	2.1	2.1	38.3
	Communication between instructors and students. I'm in my second semester and almost everything I've taken has been online and the responses have been slow to questions and other issues.	1	2.1	2.1	40.4
	Communication with clinical instructor.	1	2.1	2.1	42.6
	Get tools that actually work before you try and teach us about them (example=IPPB machine)	1	2.1	2.1	44.7
	Have an actual teacher come and teach lab sessions and not an RT that just wants extra money in their pocket.	1	2.1	2.1	46.8
	Have the teachers give us our moneys worth and actually teach the class!	1	2.1	2.1	48.9
	Instructor, lab instructor plays a lot for the success of students so explain very well, welcome questions and try to answer them and repeat the explanations if students don't get it.	1	2.1	2.1	51.1
	MORE CLINIC TIME!!!! Labs are great and very informative, but we need to be working on flesh and blood, not some plastic dummy. From my clinical experience so far, there is no comparison to lab dummies and a real patient. One other thing... I've listened to the sound bites of breath sounds included in the CDs, they failed to prepare me for what ACTUAL breath sounds are like. MORE CLINICAL TIME!!!	1	2.1	2.1	53.2
	N/A	1	2.1	2.1	55.3
	Overall organization of the program could be improved but I have noticed it is getting better.	1	2.1	2.1	57.4
	Respiratory CDs.	1	2.1	2.1	59.6
	Some of the slides could be updated, as said David Z. were great, the updated ones had no audio, and some of the ones with audio that were not David's were quite dull and didn't cover all the info on the slide itself. I didn't like that the new updated slides were merely just slides with no audio, we have books that provide that info. I found the audio to give me better understanding of certain things.	1	2.1	2.1	61.7
	Support programs/offices.	1	2.1	2.1	63.8
	The CDs.	1	2.1	2.1	66.0
	The entire Respiratory Therapy Program. Including instructional materials.	1	2.1	2.1	68.1
	The equipment should be updated so we are learning on equipment that is going to be close to what we are using in the field. Or we should have more than one piece of equipment for the classroom.	1	2.1	2.1	70.2
	The lab time could be improved. I would like to see more equipment available for students instead of one ventilator for 12 students to work on at the same time.	1	2.1	2.1	72.3
	The old powerpoints have a lot of errors in them and the new powerpoints are basically useless because there is not enough substance to them to help narrow down the important info in the textbook. Numerous issues with badly written test questions.	1	2.1	2.1	74.5
	The online classes.	1	2.1	2.1	76.6
	The online consistency of my program.	1	2.1	2.1	78.7
	The online courses.	1	2.1	2.1	80.9
The physical resources and what the students have available for use. Also online courses could be improved or completely done away with.	1	2.1	2.1	83.0	

**q15 Which resources could be improved**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	The Powerpoints.	1	2.1	2.1	85.1
	The programs resources are good where they are, but maybe year round clinicals could be an option to stay in the swing of things.	1	2.1	2.1	87.2
	The teacher and the lectures and test. Nothing corresponds with each other .	1	2.1	2.1	89.4
	There NEEDS to be a qualified instructor to meet with us PRIOR to our clinicals. It should be a requirement to attend orientation at Bay de Noc CC with that instructor as a class to go over the paperwork, due dates, requirements, etc. Clinicals are one of the most important parts of our learning experience. I don't understand why things weren't gone over with us. Everyone was in the dark!	1	2.1	2.1	91.5
	To tell you the truth it is kind of hard to do on-line classes with the amount of info you are giving in this program. Sometimes I wish I had a face to face prof.that I could speak with when I dont understand something.	1	2.1	2.1	93.6
	Updated equipment.	1	2.1	2.1	95.7
	WebCT.	1	2.1	2.1	97.9
	When we entered this program we were told that Marquette hospital and those in Green Bay area would be our neonatal and peds clinical sites. That is why most of us signed on because it was close to home. Now that we are a year into the program we find out that Green Bay is not an option for us and that we have to go down state for these clinicals. Most of us can not afford this and are wondering why Ferris would misrepresent this information to us. We are non working non traditional students which is why this program was set up. I think Ferris should make a better effort to get all of us who are in Esky, Rapid River, Iron Mountain, Marquette, and Carney michigan areas to be closer to home for the 13 week clinicals coming up as they stated in the begining. We students feel like we are put in a bad spot because we need the clinic to finish and our anxiety about this doesn't seem to matter.	1	2.1	2.1	100.0
	Total	47	100.0	100.0	

**q16 How do you think they could be improved**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Better communication with the student and other faculty involved.	21	44.7	44.7	44.7
	Upgraded resources realting to our study, tools to use to enhance our learning.	1	2.1	2.1	46.8
	Better e-mail interaction.	1	2.1	2.1	48.9
	By getting rid of them.	1	2.1	2.1	51.1
	Fire them and start over before you lose your accreditation.	1	2.1	2.1	53.2
	For the classes that you learn a lot of info in, have them meet once a week to go over the info you are learning.	1	2.1	2.1	55.3
	FSU needs their own library.	1	2.1	2.1	57.4
	Get teachers who give a damn!	1	2.1	2.1	59.6
	I'm not really sure. I don't know what other responsiblities the instructors have. So it's hard to say.	1	2.1	2.1	61.7

**q16 How do you think they could be improved**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I don't know, maybe just talk to one person in the department the whole time, if possible, while in school. That may be very difficult to do, but it's the multiple people you talk to when you start getting different answers, or the "you should talk to this person instead" type of thing.	1	2.1	2.1	63.8
	I don't think the instructor we had last semester really cares about "teaching" but more about talking about his life experiences as an RT.	1	2.1	2.1	66.0
	I think with more communication between staff and students would be helpful.	1	2.1	2.1	68.1
	I would like to see more real life situations in the classroom so when you get to clinicals you completely understand why procedures are the way they are.	1	2.1	2.1	70.2
	Lab instructors need to be professional. What they do on their own time after class is not my problem, unless it affects what is done in class to teach me what I need to know and at times this is an issue.	1	2.1	2.1	72.3
	MORE CLINICAL TIME!!!! book learning is the building blocks of this profession, but we learn the practical (real world) applications at clinics. Without more clinic time, I think all that Ferris will turn out is a bunch of book smart techs that need a lot more hands on experience before a hospital will be confident enough in their skills to let them operate on their own. Very poorly done on Ferris' part.	1	2.1	2.1	74.5
	N/A	1	2.1	2.1	76.6
	Online courses are completely pointless. The instructors are not available at all times, questions are hard to get answers for if you can get an answer at all & instructors are hard to contact because they do not check their email everyday (or at least they don't respond).	1	2.1	2.1	78.7
	Online instructors need to be more involved.	1	2.1	2.1	80.9
	See above.	1	2.1	2.1	83.0
	Seemed that it took a long time to get answers from the support personnel.	1	2.1	2.1	85.1
	Since this is a complete online program, the material for these classes should be thoughtfully put together (not just pages, which you can't even read, scanned in to a powerpoint from a different textbook.) The program's powerpoints are suppose to replace a traditional in-classroom lecture. The old ones contain numerous spelling errors and outdated material. The new ones are haphazardly thrown together with very little content to them.	1	2.1	2.1	87.2
	The format used for the online courses is different with each course. This makes it confusing. I realize different instructors have different teaching techniques, but the page format should be the same. Example I have one instructor who puts the schedule on the calendar making it easy to see when and what are due. Another instructor puts nothing on the calendar.	1	2.1	2.1	89.4
	The stuff we have is old.	1	2.1	2.1	91.5
	There is always room for improvement somewhere.	1	2.1	2.1	93.6
	They need to be reviewed, updated, professional, impressive.	1	2.1	2.1	95.7
	To have the lectures go more with the test he gives.	1	2.1	2.1	97.9
	You are so out of touch, you are not even coming close to asking the right questions!	1	2.1	2.1	100.0
	Total	47	100.0	100.0	

**q17 Additional comments/suggestions**

	Frequency	Percent	Valid Percent	Cumulative Percent
	20	42.6	42.6	42.6
	1	2.1	2.1	44.7
	1	2.1	2.1	46.8
	1	2.1	2.1	48.9
	1	2.1	2.1	51.1
	1	2.1	2.1	53.2
	1	2.1	2.1	55.3
	1	2.1	2.1	57.4
	1	2.1	2.1	59.6
	1	2.1	2.1	61.7
	1	2.1	2.1	63.8
Valid	1	2.1	2.1	66.0
	1	2.1	2.1	68.1
	1	2.1	2.1	70.2
	1	2.1	2.1	72.3



**q17 Additional comments/suggestions**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Like I stated before, the communication between staffing and students needs to be improved. Being online its hard to stay "in the loop" so to speak. I think there are questions that don't get answered and there are questions you don't know who to ask. Discussions are required, however, they are sometimes not answered.	1	2.1	2.1	74.5
	Make it clearer how to get started when doing online courses. Maybe have the students log on and get started at orientation.	1	2.1	2.1	76.6
	Make sure tests and CDs cover the same material.	1	2.1	2.1	78.7
	Online classes need revamping.	1	2.1	2.1	80.9
	Pillbeams was a great resource that Larry McMullin and staff switched to more so than some of the books that we used.	1	2.1	2.1	83.0
	regarding online courses-Resp 143 in particular-the Powerpoints are being updated, but the tests are still over the old Powerpoints(CD's). At the beginning of the semester we were told to study the new notes(PDF's) not the ones on CD. But if we do that, we fail the test because it coverthe old Powerpoints. My suggestion would be to not update the courses piecemeal, but update everything-notes, tests, etc.-before giving it to us.	1	2.1	2.1	85.1
	See above....MORE CLINIC TIME!!!	1	2.1	2.1	87.2
	Send the CDs sooner in the mail, that way I know which books are required and which are not. I purchased two books for RESP 100 and when the CDs came in the mail, the first lecture informed me there were no required texts for the course. I had wasted over \$200 on the texts.	1	2.1	2.1	89.4
	Teachers need to be looked at closer. There are unethical and disturbing situations occurring on a regular basis during our weekend labs!! Portions of this program seem to be a joke.	1	2.1	2.1	91.5
	The only thing that I could suggest is doing away with online classes. A medical program that is hands on should not be taught online.	1	2.1	2.1	93.6
	The program cannot adequately function in the condition it is currently in. It needs to be reformatted and the online portion either completely renovated or done away with.	1	2.1	2.1	95.7
	This experience has been one disaster after another. You're supposed to be a university with a very high priced education. The fact is I could have gotten more out of the public library. You have no schedules, no class directives, and sometimes no teacher at all. Get with it. I could have gotten more from a community college and have seen this in my clinical when dealing with other college students. I hope you know that you have lost a lot of students in your future from the UP. Everyone here is small town and word travels fast about where not to send your kids to college. And we may be small town but we know enough when someone tries make a whole lot of money off us and not do anything for it. I have filled these surveys out every semester, fifty bucks says this sees the trash, too!	1	2.1	2.1	97.9
	Treat the students up here with the same amount of respect as those on campus. We pay the same so when we have questions or concerns please address them promptly and then actually follow through with what was agreed upon. Actually deal with situations as they arise. Especially with books, tuition, or basic questions.	1	2.1	2.1	100.0
Total	47	100.0	100.0		

**Discussion:**

The student program evaluation survey results, as prepared by Institutional Research and Testing in August of 2008, presents results that have a varying number of respondents for individual questions. Survey results indicate that the majority of respondents believe that the professors are effective classroom and lab teachers and that instruction is based on clearly stated objectives. Faculty numbers in class and lab were perceived to be adequate by the majority of respondents. The majority of students indicated that faculty are willing to help students with their academic needs. Comments regarding personnel/classes vary in nature, with comments ranging from negative to positive. Some students expressed dissatisfaction with learning in

an online environment while other students indicated that the experience was positive. A recurring theme was that students in online courses felt that they were at a disadvantage compared to those in face-to-face courses given the nature of the profession and learning objectives. It appeared that they wished they could have had more opportunities to meet in person and have formal class time.

Because many of the students are in online courses, questions regarding the classroom facilities were often marked as not applicable. Regarding lab physical facilities, the majority of the respondents provided favorable responses. A slightly larger percentage of students indicated that lab equipment was insufficient as compared to those indicating that it was adequate. The number of students indicating adequacy of variety and supplies for lab was nearly equal to those indicating inadequacies in these areas. Even with questionable satisfaction regarding lab equipment and supplies, the largest group of respondents (over 40%) indicated that they agree or somewhat agree that lab activities helped them to perform effectively in the clinical setting, and nearly the same percent indicated that lab equipment and supplies were supplemented by clinical affiliates. The comments section regarding physical facilities indicated that a preponderance of students providing comments felt that lab equipment and supplies were inadequate. The sharing of equipment or lack of equipment was seen as an obstacle to learning fundamental clinical procedures.

Questions regarding services that are primarily utilized by on-campus students most often had a preponderance of responses indicating not applicable. These questions included ones about library resources, availability of tutorials, computers, and instructional support services. Student comments support the assumption that these services were seen as not applicable because of the off-campus nature of the program.

An extensive portion of the survey was dedicated to clinical experiences. It appears from the survey results that a significant portion of survey respondents had not yet entered clinical rotations. There were a large number of responses in the not applicable category for the clinical experience portion of the survey. For respondents who answered other than not applicable to the questions, the majority of students indicated positive clinical experiences. Student comments regarding clinical experiences are most often positive but there are also several comments expressing concern about lack of orientation to clinical sites and interactions with clinical instructors. Questions regarding student interactions with physicians did not yield any strong tendencies.

Demographic information indicated that the majority of students completing the survey had finished 1 year of the program (27.7%), and the next largest group of respondents had completed 2 years (23.4%). When asked to rate the overall quality of resources, over 60% of respondents indicated that the respiratory care resources were good or very good. Responses to the question, "which resources provided most support" were varied and included instructors, lab, narrated PowerPoints, clinical sites and course content. When asked to clarify why they felt a particular resource was most useful, the importance of hands on training and student/professional interaction is a recurring theme. Resources that the respondents indicated needed to be improved also ran the gamut from instructional materials, instructors, lab equipment, student/instructor interactions, availability of clinical sites, etc. When asked how resources could be improved, a recurring theme was improved communication. Another recurring recommendation was updating of course materials/improved organization.

A complete synopsis of the student program evaluation could not be provided in a brief summary of this nature because of the varied responses received. From forced-choice answers, it would appear that the majority of the respondents feel that the program is meeting student expectations. However, student comments do express concerns of varied nature.

The chart summarizes the main concerns identified by the student program survey and the action plan that has been implemented to fix the problem:

<b>Problem Identified</b>	<b>Action Taken</b>
Poor communication between instructor and student in Online Courses.	More instruction of faculty regarding conducting Online courses.
Lab resources were considered inadequate.	Additional lab equipment was recently purchased.

#### **D. Faculty Perceptions**

##### **Faculty Survey 2009**

		<b>Results</b>
1	Curriculum designed to facilitate student learning	2.66
2	Faculty empowerment in program development and long-term strategy	4.0
3	Faculty participation in program development	3.66
4	Organization and structure of courses	2.33
5	Use of course and program objectives	2.33
6	Use of labor market analysis	2.0
7	Appropriateness of student textbooks	2.66
8	Availability and student use of computers and the internet	2.0
9	Adherence to CoARC standards and principles	2.66
10	Integration and use of student follow-up information	2.33
11	Relevance and availability of supportive courses	3.33
12	Administrative response to faculty input	3.33
13	Quality and number of available internship sites	2.0
14	Overall quality of clinical education	2.0
15	Technical and teaching ability of adjunct faculty (ACIs)	2.66
16	Technical, organization, and teaching ability of Clinical Coordinator	2.33
17	Program communication with and response to clinical sites	2.33
18	Program availability and accessibility to students and potential students	3.33
19	Program recruitment efforts	3.0
20	Program efforts to achieve a bias-free environment	3.66
21	Provisions, availability, and relevance of student advisement	2.66
22	Faculty participation in college and university committees	2.0
23	Use and timeliness of Advisory Committee	1.66
24	Availability and accessibility of adequate classrooms and AV equipment	3.0
25	Size and configuration of laboratory space	3.0
26	Quality and availability of teaching/learning aids	2.33
27	Quality and quantity of radiographic (lab) equipment	2.33
28	Availability of office equipment and supplies	3.66
29	Size and layout of office space	3.0
30	Quality and applicability of computer equipment for instructors	3.66
31	Availability and timeliness of computer support	4.0
32	Applicability and accessibility of library resources	4.0
33	Faculty and/or student use of Allied Health Sciences Library	2.5
34	Availability of fiscal resources sufficient to provide quality instruction	2.33
35	Availability of textbooks and periodicals to instructors	3.33
36	Overall program quality	2.66
37	Faculty works together as a team	2.66
38	College and university administration foster a positive work environment	3.33
39	Availability of college administration	3.33
40	Adequate education to meet national standards (CoARC, etc.)	3.0

## Discussion

The purpose of this of this activity is to assess faculty perceptions regarding the following aspects of the program: curriculum, resources, admissions standards, degree of commitment by the administration, processes and procedures used, and their overall feelings.

Surveys were given to all faculty and staff in the Respiratory program. Three out of the 4 faculty and staff members completed the survey. The survey was based on a scale of 1-4 with 1 being Below Average; 2-Acceptable; 3-Good; and 4-Excellent. An additional column of N/A was available for Don't know or Non-applicable.

- All areas of the faculty survey indicated an average of 2 (Good) or above except for the Use and timeliness of Advisory Committee.

Additional Comments included:

Question 4 (Organization and structure of courses) is going to be "Excellent" within 2 years.

I believe that Question 36 (Overall program quality) is improving rapidly but still has some way to go.

I believe that the CAHS Dean and the two interim managers have been very receptive, helpful, and encouraging. Program advancement has certainly been expedited and I have been pleased with their assistance.

The chart summarizes the main concerns identified by the faculty survey and the action plan that has been implemented to fix the problem:

<b>Problem Identified</b>	<b>Action Taken</b>
Availability and student use of computers and the internet.	Students will be strongly advised to use more current computer hardware with internet access via DSL rather than Dialup modem
Quality and number of available internship sites.	Currently exploring new clinical partners and affiliates throughout Michigan and surrounding areas.

## **E. Advisory Committee Perceptions**

### **Respiratory Care Advisory Committee Survey**

	<b>1=Excellent 2= Good 3= Fair 4=Poor 5= Unacceptable</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1	I understand the vision and goals of the FSU Respiratory Care Program		4			
2	I understand the purpose and tasks of the Advisory Committee		3	1		
3	The current curriculum meets the need of our graduating students.	1	1	2		
4	The program provides students with the necessary skills for entering the job market.	1	2	1		
5	The program meets the current trends in Respiratory Care.	1	3			
6	Program is continually reviewed and improved to keep up with changes in the field.		4			
7	Students have a strong understanding of respiratory concepts upon graduating.		2	2		
8	Equipment used in labs is representative of equipment being used in the clinical environment.	1	1	1	1	
9	Students and sites display enthusiasm for the program.		1	2	1	
10	The advisory committee is utilized appropriately for input on program improvement.			3	1	
11	There is appropriate communication between the program's community of interests	1		2	1	
12	The faculty is meeting the needs of the students.		4			

## Discussion:

Although the advisory committee members were generally in agreement with the questions, two questions (#10 and #11) produced a response of poor.

### **#10 The advisory committee is utilized appropriately for input on program improvement.**

Many of the committee members felt that there should be more frequent meetings to allow the sharing of their input and concerns.

### **#11 There is appropriate communication between the program's community of interests**

The committee members felt that ongoing communication between the various components of the program was poor.

There were some additional ideas that were expressed.

- ✓ The program should increase clinical internships to total 1,000+ hours.
- ✓ Faculty should teach only those classes that they are strong in rather than randomly assigned.
- ✓ There should be more frequent meetings of the Advisory Committee.

The chart summarizes the main concerns identified by the advisory committee survey and the action plan that has been implemented to fix the problem:

Problem Identified	Action Taken
Too few Advisory committee meetings.	More frequent Advisory committee meetings are planned.
Communication between the various components of the program is poor.	More frequent communication is planned via distribution of program updates, conference calls and meetings.

## F. Adjunct clinical instructors survey

### FSU RESPIRATORY CARE PROGRAM - Adjunct Instructor Survey

**1=Excellent 2= Good 3= Fair 4=Poor 5= Unacceptable**

		1	2	3	4	5
1	I understand the vision and goals of the program	2	1			
2	The courses that I teach are organized and well prepared	1	1		1	
3	The Lead Faculty responds to my needs in a timely fashion	2	1			
4	The required course textbooks are appropriate	3				
5	I feel comfortable teaching the courses that are assigned	1	2			
6	I feel prepared to teach the courses that are assigned		3			
7	The course content is appropriate	2	1			
8	The course materials( syllabi, reading assignments, study guides) provided to me are effective		1	1	1	
9	Tests are given at appropriate time intervals	2	1			
10	I feel that the students are learning the material	1	1	1		
11	The quality of the students completing my class meet and/or exceed the course objectives	1	2			
12	I feel that the structure of the courses (Lecture, Lab, Tests, and Checkoffs)adequately the					
	prepares the student for their clinical experience	2		1		
13	My overall impression of the Respiratory Care Program	1	2			

## Discussion

Overall, the adjunct instructors are satisfied teaching the assigned courses. They reflected that the courses were organized and well prepared. One adjunct instructor took exception with Question #2 because the changes made to the courses taught under WebCT were not transferred accurately into FerrisConnect and as a consequence a lot of time was spent trying to add resources to the FerrisConnect courses. Question #6 - "I feel prepared to teach the courses assigned" produced a surprising unanimous response of fair. The

adjunct instructors admitted that they were weak in some of the material they were teaching and not confident answering student questions in some areas.

Question #8 "*The course materials ( syllabi, reading assignments, study guides) provided to me are effective*" seemed to reveal an opportunity for improvement. All of the classes for Respiratory Care Program are not totally identical in terms of reading assignments, laboratory worksheet assignments, term paper assignments, and study guides due to the differences in teaching styles between faculty members.

Question 10 "*I feel that the students are learning the material*" seemed to reveal a wider degree of opinion regarding their sentiment on student learning. However, Question 11 and 12 seem to confirm that the Adjunct Instructors do believe that the students are learning and being prepared for their clinical experience.

Question #12 also seemed to affirm that the Adjunct Instructors were satisfied with the Respiratory Care Program.

The chart summarizes the main concerns identified by the adjunct clinical instructor survey and the action plan that has been implemented to fix the problem:

<b>Problem Identified</b>	<b>Action Taken</b>
Adjunct instructors do not feel prepared to teach assigned courses.	Plan to conduct an Adjunct Instructor meeting to cover how to teach online and conduct effective laboratory sessions.
Course materials provided are not effective.	Plan to have instructional sessions with the Adjunct Instructors on how to utilize student study guides.

### Section 3: Program Profile

#### A. Profile of Students

##### 1. Student Demographics Profile

###### a. Gender, race/ethnicity, age

Pre-RESP Average Age:		RESP Average Age:	
<i>Year in Program</i>	<i>Average Age</i>	<i>Year in Program</i>	<i>Average Age</i>
<b>2004</b>	<b>28</b>	<b>2004</b>	<b>31</b>
<b>2005</b>	<b>26</b>	<b>2005</b>	<b>32</b>
<b>2006</b>	<b>28</b>	<b>2006</b>	<b>32</b>
<b>2007</b>	<b>24</b>	<b>2007</b>	<b>32</b>
<b>2008</b>	<b>21</b>	<b>2008</b>	<b>31</b>
<b>Average age past Five Years:</b>	<b>25</b>	<b>Average age past Five Years:</b>	<b>31</b>

<b>RESP Gender</b>			
<i>Academic Year</i>	<i>Male</i>	<i>Female</i>	<i>Total number enrolled</i>
<b>2004</b>	<b>13</b>	<b>38</b>	<b>51</b>
<b>2005</b>	<b>31</b>	<b>70</b>	<b>101</b>
<b>2006</b>	<b>31</b>	<b>104</b>	<b>135</b>
<b>2007</b>	<b>25</b>	<b>109</b>	<b>134</b>
<b>2008</b>	<b>37</b>	<b>101</b>	<b>138</b>
<b>Average past Five Years:</b>	<b>27</b>	<b>84</b>	<b>112</b>

<b>RESP: Race/ethnicity</b>								
<i>Year</i>	<i>Unknown</i>	<i>Black</i>	<i>Hispanic</i>	<i>Indian/ Alaskan</i>	<i>Asian/ Pac. Island</i>	<i>White</i>	<i>Foreign</i>	<i>Total</i>
<b>2004</b>	<b>12</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>37</b>	<b>1</b>	<b>51</b>
<b>2005</b>	<b>24</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>68</b>	<b>2</b>	<b>101</b>
<b>2006</b>	<b>25</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>97</b>	<b>1</b>	<b>135</b>
<b>2007</b>	<b>11</b>	<b>8</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>108</b>	<b>0</b>	<b>134</b>
<b>2008</b>	<b>14</b>	<b>7</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>110</b>	<b>0</b>	<b>138</b>
<b>Average over past 5 years:</b>	<b>17</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>84</b>	<b>1</b>	<b>112</b>

**Gender, race/ethnicity, age:** According to the data provided the average age of the pre-resp student is 25 and the average age of the student entering the program is 31. Female respiratory students made up an average of 76% of the students compared to 24% of male students. The respiratory students are represented by 81% Caucasian and 19% minorities. The number of respiratory students enrolled in the program has increased since 2004 due to the addition of the off campus sites.

The Respiratory Care profession has typically been held by women. The trend in the current student population simply reflects that trend. The male to female ratio does not impact the curriculum, delivery or scheduling of the program. The programs ratio of ethnic students enrolled in the program are also not of concern to the program. The average age of the student is appropriate and has increased due to the off-campus non-traditional college students.

**b. In-State vs. Out of State:**

Pre-RESP Residency:				RESP Residency:			
Academic Year	Resident	Midwest Compact	Non-Resident	Academic Year	Resident	Midwest Compact	Non Resident
2004	12	0	0	2004	50	0	1
2005	21	0	0	2005	98	1	2
2006	21	0	0	2006	135	0	0
2007	38	0	0	2007	134	0	0
2008	30	0	0	2008	138	0	0
<b>Average past Five Years:</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>Average past Five Years:</b>	<b>111</b>	<b>.2</b>	<b>.6</b>

According to the data provided, the program attracts 100% of the pre-respiratory and 99% of the current respiratory students from in-state residents. This is not surprising due to the fact that the clinical internship sites are located within the State of Michigan. The internship portion of the program appeals to in-state students more than out-of-state students because internship sites are located within 300 hundred miles of Big Rapids. Whether students are in-state or out-of-state does not impact the curriculum, scheduling or delivery of the program due to the use of Ferris Connect and clinical site visits.

**c. Full-time vs part-time:**

RESP: Full-time vs. Part-time			
Academic Year	Full-time	Part-time	Total number enrolled
2004	18	33	51
2005	26	75	101
2006	57	78	135
2007	51	83	134
2008	45	93	138
<b>Average past Five Years:</b>	<b>39</b>	<b>72</b>	<b>78</b>

The data shows an average of 92% of the respiratory students are part-time particularly due to the off campus based curriculum model. Whether students are full time or part time does not affect the curriculum, delivery, or scheduling of the program.

**d. Attend classes during the day, in the evenings, and on weekend:**

On campus lecture courses are only offered during the day while laboratory classes are offered with both a day and evening sessions. In the off campus cohorts, laboratory sessions are offered only on weekends during the day.

**% classes day vs night**

The only Respiratory Care classes offered in the evening are the 6 laboratory classes; RESP 136, RESP 166, RESP 221, RESP 254, RESP 211, and RESP 236 which offer a day and evening sessions. These 6 evening sessions account for 12% of the total on campus Respiratory Care classes.

**% classes weekday vs weekend**

100% of the classes for the on campus program are offered only during weekdays.

For the off campus students, the following 6 laboratory classes; RESP 136, RESP 166, RESP 221, RESP 254, RESP 211, and RESP 236 are only offered during the weekends. These weekend classes represent 25% of the off campus (laboratory) classes.



***Enrolled in classes on and off campus:***

Pre-RESP On Campus - Off Campus			RESP On Campus - Off Campus		
Academic Year	Off Campus	On Campus	Academic Year	Off Campus	On Campus
2004	0	12	2004	18	33
2005	0	21	2005	68	33
2006	4	17	2006	103	33
2007	7	31	2007	100	34
2008	8	22	2008	104	34
<b>Average past Five Years:</b>	<b>4</b>	<b>21</b>	<b>Average past Five Years:</b>	<b>79</b>	<b>33</b>

The popularity of off campus programming has increased the off campus student enrollment in respiratory care to an average of 71% while the remaining 29% are the traditional on campus student. This increase in off campus students has provided the program faculty the opportunity to enhance their delivery of both didactic and laboratory instruction including supervision of clinical interns.

***f. Enrolled in 100% mixed delivery or on-line courses:***

***% class hours mixed delivery***

The program currently offers no mixed delivery courses.

***% class hours fully on-line***

For the on campus students, 2 courses (non laboratory) or 8% are offered online.

For the off campus cohort students, all 19 courses (non laboratory) or 75% of the total classes are offered fully online.

***2. Quality of students.***

***a. What is the range and average GPA of all students currently enrolled in the program? ACT? Comment on this data.***

GPA Respiratory Care Student			
Academic Year	Average GPA	Min. GPA	Maximum GPA
2004	3.31	1.683	3.975
2005	3.27	1.375	3.940
2006	3.35	1.41	4
2007	3.32	1.79	4
2008	3.38	1.68	4
<b>Average past Five Years:</b>	<b>3.33</b>	<b>1.59</b>	<b>3.98</b>

ACT Respiratory Care Student			
Academic Year	Average ACT	Min. ACT	Maximum ACT
2004	20.24	15	26
2005	19.38	8	26
2006	19.20	8	26
2007	19.81	14	26
2008	20.18	12	26
<b>Average past Five Years:</b>	<b>19.76</b>	<b>11.20</b>	<b>26</b>

Discussion:

Data shows that the range of GPA for the Respiratory Care student is 1.59 to 3.98 and the range for the ACT scores is 11.20 to 26. The Respiratory Care student had an average GPA of 3.33 and an average ACT score of 19.76. The average GPA has risen slightly from 3.31 in 2004 to 3.38 in 2008 while the average ACT score declined slightly from the average score of 20.24 in 2004 to 19.81 in 2007 before rising to 20.18 in 2008. These changes in GPA and ACT scores should not impact students from getting into the program; rather it should indicate that they have stronger skills to remain in the program.

***b. What are the range and average GPA's of students graduating from the program? ACT? Comment on this data.***

<b>GPA Respiratory Care Student-Graduated</b>			
<b>Academic Year</b>	<b>Average GPA</b>	<b>Min. GPA</b>	<b>Maximum GPA</b>
<b>2004</b>	<b>2.94</b>	<b>2.455</b>	<b>3.198</b>
<b>2005</b>	<b>3.31</b>	<b>2.806</b>	<b>3.808</b>
<b>2006</b>	<b>3.29</b>	<b>2.81</b>	<b>3.970</b>
<b>2007</b>	<b>3.47</b>	<b>2.68</b>	<b>3.97</b>
<b>2008</b>	<b>3.47</b>	<b>2.75</b>	<b>4</b>
<b>Average past Five Years:</b>	<b>3.30</b>	<b>2.7</b>	<b>3.79</b>

<b>ACT Respiratory Care Student - Graduated</b>			
<b>Academic Year</b>	<b>Average ACT</b>	<b>Min. ACT</b>	<b>Maximum ACT</b>
<b>2004</b>	<b>20</b>	<b>18</b>	<b>21</b>
<b>2005</b>	<b>21</b>	<b>16</b>	<b>27</b>
<b>2006</b>	<b>19</b>	<b>14</b>	<b>24</b>
<b>2007</b>	<b>20</b>	<b>14</b>	<b>26</b>
<b>2008</b>	<b>20</b>	<b>13</b>	<b>25</b>
<b>Average past Five Years:</b>	<b>20</b>	<b>15</b>	<b>25</b>

**Discussion:**

The range of GPA for the respiratory care graduate is 2.7 to 3.79 with an average GPA of 3.3. The range of ACT scores for the respiratory care graduate is 15-25 with an average ACT score of 20.

Based on the averages and ranges listed above, the program maintains a qualified student throughout the professional sequence through graduation from the program.

**c. In addition to ACT and GPA, identify and evaluate measures that are used to assess the quality of students entering the program.**

The current criterion for admission into the program is based on only one factor: GPA of 2.5. The current program schedule offerings both on and off campus do not require students to complete important pre-requisite courses that have now been determined to be related to student success in the professional sequence. And performance of graduates on certification and registry exams has not been consistently at or above the national average. In addition, significant increase and interest in the program along with increased enrollment numbers requires a more discretionary admission process.

Thus new admission criteria measures which will become effective Fall 2010 have been approved. The new criteria assess the quality of students entering the Respiratory Care program by requiring a minimum college GPA of 2.7 as well as the completion of the following designated pre-requisite course work with minimal course grade requirements: CHEM 103, BIOL 109 & MATH 110 – minimum grades of B- required and CAHS Core Curriculum courses – minimum grades of C required.

**d. Identify academic awards (e.g., scholarships or fellowships) students in the program have earned. Comment on the significance of these awards to the program and students.**

There is currently one FSU academic scholarship, the Brian and Grace Brown Scholarship, that is awarded specifically to Respiratory Care students. It is based on GPA and financial need. Three students were awarded this scholarship for the academic year 2009-10.

**e. What scholarly/creative activities (e.g., symposium presentations, other presentations or awards) have students in the program participated in? Comment on the significance of these activities to the program and students.**

There is a state / regional competition available for respiratory care students called the "Sputum Bowl" sponsored by the American Association for Respiratory Care (AARC). There has not been campus based teams competing in the Sputum Bowl for several years. No (off campus) students have competed in this competition due to proximity from campus. This does not impact the curriculum in any way. Students continue to complete case study presentations on campus and are encouraged to engage in the Sputum Bowl competitions.

**f. What are other accomplishments of students in the program? Comment on the significance of these accomplishments to the program and students.**

The students have contributed much time and effort in helping the community through money raised with their pop can collection and donation to Renucci Hospitality House. The students also participated in the Walk for Life event to raise money for Breast Cancer Awareness. The Respiratory Care program is a charter affiliate of the Lambda Beta Honor Society in which 2-3 student names are submitted each year for nomination for membership. These accomplishments have brought about better awareness for students of charitable causes and better awareness of the Respiratory Care program in the community.

**3. Employability of Students**

**a. How many graduates have become employed full-time in the field within one year of receiving their degree?**



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Personnel Satellites & Affiliates Enrollment & Retention Outcomes Survey Worksheet

Grad Year	2008	2007	2006	2005	2004	2003	2002
# of Grads	54	43	28	11	9	0	0
# of grads employed	51	40	25	11	6	0	0
# of surveys returned	2	0	15	0	0	0	0
Cognitive Domain - # negative survey items	0	0	0	0	0	0	0

Percent of Surveys Returned (average 2007+2006+2005): 19.74 % Threshold: 18

Percent of Surveys Returned (average 2007 through 2003): 18

The average employment rate based on the above CAAHEP data for the Respiratory Care program over the past 3 years is 92.8%. So far this year because of the economy, the employment rate for the 2009 graduates is 77.8% however 100% of the 2008 graduates are employed in respiratory care.

**b. What is the average starting salary of graduates who become employed full time in field since inception or the last program review? Compare regional and national trends.**

Earnings of Respiratory Therapists and Technicians vary depending on their experience, education, and certification, and the type, size, and geographic location of the employer.

Nationally, the annual salaries (early 2007) of Respiratory Therapists employed by hospitals and related institutions were:

Title	AVERAGE	MIDDLE RANGE
RESPIRATORY THERAPIST	\$48,100	\$43,600 - \$51,500
CERTIIFIED RESPIRATORY THERAPY TECH.	\$42,100	\$37,400 - \$44,400

Nationally, the median yearly earnings of Respiratory Therapists were \$46,592 in 2007. The median yearly earnings of "all" workers in the U.S. were \$36,140 in 2007.

Registered Respiratory Therapists (with AMA-Accredited training) employed by the federal government had salaries ranging from \$41,206 to \$46,626 per year in 2008. The salaries of these federal government workers may be higher in some urban areas.

In Michigan hospitals, the annual salaries (late 2007) of Registered Respiratory Therapists were:

AREA	AVERAGE MINIMUM	AVERAGE MAXIMUM	AVERAGE
State-wide	\$44,117	\$52,042	\$48,381
Southeast	\$45,906	\$52,915	\$50,086
North Central	\$43,202	\$48,818	\$45,552
East Central	\$41,704	\$51,043	\$45,989
Upper Peninsula	\$42,370	\$47,632	\$44,221
South West	\$44,242	\$52,021	\$48,547

Respiratory Therapy Technicians employed by the State of Michigan earned from \$28,981 to \$47,398 per year in early 2008.

Respiratory Therapists usually receive hospitalization and life insurance; paid vacations; sick leave; disability insurance; pension plans; tuition assistance; uniforms; and parking. Benefits are usually paid for, at least in part, by the employer.

A Respiratory Technician may advance to Respiratory Therapist and eventually to Chief Respiratory Therapist. Workers who are registered or certified advance more rapidly than do those without these credentials.

Reference: <http://www.michigan.gov/careers/0,1607,7-170-46398-64537--,00.html>

**c. How many graduates have become employed as part-time or temporary workers in the field within one year of receiving their degree?**

A survey of the most recent graduates (2009) showed that 77.8% were employed with 67% working fulltime and 33% employed part-time or temporary.

**d. Describe the career assistance available to the students. What is student perception of career assistance?**

Career assistance is provided by the Respiratory Care Program in the form of personal references and resume review. Faculty members have many ties within the local and surrounding communities that keep students apprised of job openings. In addition, Ferris students attend university sponsored career fairs and use the employment office for resources as well as interviewing and resume writing training.

**e. How many graduates continue to be employed in the field?**

Previously ninety-seven percent of the graduates were initially employed in the field of respiratory care following graduation. Only 3 percent of the respondents from the 2008 graduate survey stated they are not longer working in the field. A survey of the May 2009 graduates showed that only 78% were employed due to the tight job market.

**f. Describe and comment on geographic distribution of employed graduates**

This data was not tracked in any of the recent surveys.

**g. How many students and/or graduates go on for additional educational training?**

This data was not tracked in any recent surveys, although it has been generally observed that 3-5 students each year pursue an advanced degree.

**h. Where do most students and/or graduates obtain their additional educational training?**

Students continue their education by receiving a Bachelors of Science degree in Health Care Systems Administration at Ferris.

**B. Enrollment**

**1. What is the anticipated fall enrollment for the program?**

The anticipated enrollment of the Respiratory Care program including on campus and off campus cohorts for fall 2009 is 206 students.

**Student Enrollment for Fall 2004-2008 based on 2008 Fact Book:**

<b>RESP: Full-time vs. Part-time</b>			
<i>Academic Year</i>	<i>Full-time</i>	<i>Part-time</i>	<i>Total number enrolled</i>
<b>2004</b>	<b>18</b>	<b>33</b>	<b>51</b>
<b>2005</b>	<b>26</b>	<b>75</b>	<b>101</b>
<b>2006</b>	<b>57</b>	<b>78</b>	<b>135</b>
<b>2007</b>	<b>51</b>	<b>83</b>	<b>134</b>
<b>2008</b>	<b>45</b>	<b>93</b>	<b>138</b>

<b>RESP On Campus - Off Campus</b>			
<i>Academic Year</i>	<i>Off Campus</i>	<i>On Campus</i>	<i>Total number enrolled</i>
<b>2004</b>	<b>18</b>	<b>33</b>	<b>51</b>
<b>2005</b>	<b>68</b>	<b>33</b>	<b>101</b>
<b>2006</b>	<b>103</b>	<b>32</b>	<b>135</b>
<b>2007</b>	<b>100</b>	<b>34</b>	<b>134</b>
<b>2008</b>	<b>104</b>	<b>34</b>	<b>138</b>

**Response:** Total enrollment has almost tripled since 2004 particularly due to the increase in off campus students. The popularity and demand for this off campus model is evident.

**2. Have enrollment and student credit hour production (SCH) increased or decreased?**

Enrollment in the program has been very strong since 2005. The combined Fall + Winter SCH increased from 853 in 04-05 academic year to 2409 in the 07-08 academic year.

The graph shown below demonstrates that the student credit hour production in the program has tripled over the last five years.

**Student Credit Hours**

Year	Summer	Fall	Winter	F + W
2004-2005	266.00	430.00	423.00	853.00
2005-2006	505.00	754.00	1065.00	1819.00
2006-2007	838.00	1231.00	1217.00	2448.00
2007-2008	1020.00	1243.00	1166.00	2409.00

**3. Since the last program review how many students apply to the program annually?**

Year	Site Location	Students Applying to Program
Fall 2008	Big Rapids	29
Spring 2008	Grand Rapids	32
Summer 2008	Lansing	34
Fall 2008	Harrison	28
2009	Big Rapids	38
Spring 2009	Grand Rapids	31
Summer 2009	Lansing	30
	Harrison	NA
Fall 2009	Petoskey	56

**Total number applicants 2008 - 123**

**Total number applicants 2009 - 155**

**4. Of those who apply, how many and what percentage are admitted?**

Year	Site Location	Students Applying to Program	Number Accepted	% Admitted
Fall 2008	Big Rapids	29	24	83%
Spring 2008	Grand Rapids	32	24	75%
Summer 2008	Lansing	34	24	70%
Fall 2008	Harrison	28	24	86%
2009	Big Rapids	38	30	80%
Spring 2009	Grand Rapids	31	24	77%
Summer 2009	Lansing	30	24	80%
	Harrison	NA	NA	NA
Fall 2009	Petoskey	56	40	100%

\*Wait list kept prior to Fall of 2008

**5. Of those admitted how many and what percentage enroll?**

During the admission process for the 2008 academic school year, 100% of the students accepted into the program enrolled in the program.

**6. What are the program's current enrollment goals, strategy, and efforts to maintain/increase/decrease the number of students in the program? Please explain.**

The program's current enrollment goal is to phase out a few of the off campus cohorts as the students graduate. For instance, the demand for students in the Escanaba and Alpena area has declined. We have

met the need for respiratory therapists in those geographic locations so we are no longer accepting students in those two cohorts. However, a need has been demonstrated for the Petoskey area and a new cohort will begin in Fall 2009.

The strategy for achieving an enrollment balance will be based upon regional student interest and current job market demand for Respiratory Therapists.

### **C. PROGRAM CAPACITY**

#### **1. What is the appropriate program enrollment capacity, given the available faculty, physical resources, funding, accreditation requirements, state and federal regulations and other factors? Which of these items limits program enrollment capacity? Please explain any difference between capacity and current enrollment.**

Enrollment in the Respiratory Care program for Fall 2009 will be 206 students due to increased enrollment on the Big Rapids campus and the addition of the Petoskey based students. The program is operating at full capacity at this time.

Limiting factors in regards to the capacity of this program include the following:

- Number of clinical internship sites
- Availability of laboratory space at off campus sites
- Availability of equipment
- Availability of regional clinical instructors

Competition for clinical sites within the state is an issue. Hospitals are at full capacity for the number of students they are allowed to take each year. Internship opportunities change from semester to semester and year to year with the clinical sites. As hospitals work to decrease staffing expenses, they offer fewer opportunities for preceptors to work with students. They often decline students when they have a high volume of vacation days requested from their staff. It is a challenge to place our students in certain areas during specific semesters.

With the assistance of a student support staff person and the recent addition of two advisors dedicated to our off-campus students, the program has been able to increase our services and manage these 100 or more off campus students. The program is in the process of acquiring adjunct instructors in various parts of the state to provide clinical instruction, evaluate interns, and teach online and laboratory courses. This is an attempt to decrease time away from campus for full-time faculty, decrease travel expenses, offer students increased access to instructors and provide opportunity for the full time faculty to concentrate on teaching, advising and program development. Due to the limited number of clinical sites and number of full-time faculty members in the program, it would be very difficult to increase the program capacity at this time. In fact, enrollment numbers need to be monitored closely due to the number of clinical sites.

### **D. RETENTION and GRADUATION:**

#### **1. Give the annual attrition rate (number and % of students) in the program.**

<b>class starting year</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Admission #	37	31	84	83
Retention	30	28	84	83
Attrition	7	3	0	0
% Attrition	23%	10%	0%	0%

#### **2. What are the program's current goals, strategy and efforts to retain students in the program?**

The program's current retention goal is to continue to maintain low attrition while maintaining and increasing academic quality. The program has increased admission requirements for students applying to the Respiratory Care Program for Fall 2010 semester.

The program has also undergone a major curriculum change. Classes were restructured and course sequences were modified including the addition of prerequisite courses to provide the necessary foundation and professional skills prior to internship.

Faculty continue to improve their teaching and assessment skills to better prepare the students for both clinical and didactic testing. The following are examples:

*Improve Faculty skills*

Two of the faculty are currently working toward attainment of their Master of Science degree in Education.

Faculty have attended faculty transition and continuing education seminars on teaching techniques.

Faculty have implemented innovative teaching techniques such as laboratory clinical simulations.

*Respond to student and graduate assessment of teaching*

Faculty change teaching approaches based on course assessments, SAI's, student surveys, and testing scores.

**3. Describe and assess trends in number of degrees awarded in the program.**

<b>Respiratory Care Graduates</b>		
<b>2005-2006</b>	<b>2006-2007</b>	<b>2007-2008</b>
26	42	55

The number of degrees awarded in respiratory care has doubled in two years with the addition of the off campus students.

**4. How many students who enroll in the program graduate from it within the prescribed time?**

***Comment on trends.***

On average, 75% of the students graduate within the 6 semester prescribed time. Nearly all of the remaining 25% of the class require an extra semester or two to complete the general education courses. The new curriculum that will be implemented in Fall 2010 requires students to complete the general education on schedule before they begin the professional sequence so they will graduate within the prescribed time.

**5. On average, how long does it take a student to graduate from the program? Please comment.**

On average it takes 6 semesters to complete the general education and professional sequence courses.

**E. ACCESS**

**1. Describe and assess the program's actions to make itself accessible to students. Use examples such as off-campus courses, accelerated courses or other types of flexible learning, use of summer courses, multiple program entry points, e-learning, mixed delivery courses, scheduling.**

Traditional programs offerings occur in Big Rapids and Grand Rapids. Students in both of those locations attend classes and labs on campus during the day or evenings. However, students in the off-campus cohorts take all of their didactic courses via FerrisConnect and attend their laboratory classes on weekends at local community colleges. This formatting for the off campus students has made the program accessible to students who would never have the opportunity to attend a respiratory care program, allows for multiple entry points and increased enrollment in the program.



**2. Discuss what effects the actions described in (1) have had on the program. Use examples such as program visibility, market share, enrollment, and faculty load, computer and other resources.**

The following summarizes the programs accessibility to students:

Program visibility: On campus labs set the program apart from other programs in the state. The off-campus locations provide some flexibility for part-time working students.

Enrollment, market share: Students choose Ferris because of the unique lab learning design and off campus locations.

Faculty load : No impact on current teaching and workload of faculty.

Computer resource: On campus students have access to the library, computer labs, and equipment on campus. Off-campus students are able to use computers at local campuses.

**3. How do the actions described in (1) advance or hinder the program goals and priorities.**

The actions described above advance the goals of the program by attracting non-traditional students with jobs and families.

**F. Curriculum**

**1. Program requirements. Describe and assess the program-related courses for graduation.**

The new curriculum effective Fall 2010 requires 72 credit hours for graduation. Twenty-four out of the 72 credits are program related courses or prerequisites. Chart below identifies rationale for each program related course.

<b>Courses in the RESP Program</b>	<b>Rationale for courses</b>
ENGL 150 **prerequisite to enter the RESP professional sequence	Communication competence * accreditation standard
ENGL 250	Communication competence *accreditation standard
COMM 105 or 221	Communication competence *accreditation standard
BIOL 109 **prerequisite to enter the RESP professional sequence	Scientific understanding *accreditation standard
CHEM 103 **prerequisite to enter the RESP professional sequence	Scientific understanding *accreditation standard
Social Awareness Foundation Course Elective * program does not prescribe which social awareness class to be taken	Social awareness FSU associate degree requirement
Cultural Enrichment Course Elective * program does not prescribe which cultural enrichment class to be taken	Cultural enrichment FSU associate degree requirement
CCHS 101 Orientation to Healthcare	CAHS Core Requirement Students are introduced to the healthcare system.
CCHS 102 Safety Issues in Healthcare	CAHS Core Requirement Students are introduced and reflect upon issues affecting healthcare.
CCHS 103 Clinical skills or proficiency * students can take the course or demonstrate competency **prerequisite to enter the RESP professional sequence	CAHS Core Requirement Students learn the basic skills they need as a clinical practitioner.

MRIS 102 Medical Terminology or proficiency * students can take the course or demonstrate competency **prerequisite to enter the RESP professional sequence	CAHS Core Requirement
MATH 110 Fundamentals of Algebra * students must take the course or have a MATH ACT score of 19 **prerequisite to enter the RESP professional sequence	Math Competency *Requirement for accreditation

\*\*prerequisite courses

***a. As part of the graduation requirements of the current program, list directed electives and directed general education courses. Provide rationale for these selections.***

General Education courses required by the program are: English 150 and 250, Core Curriculum courses (CCHS 101, 102 and 103 and MRIS 102), Communication course (COMM 105 or 221), Biology 109, Chemistry 103, and Math 110 or ACT sub-score of 19. All of these courses are required by either FSU, CAHS or specialized accreditation guidelines. Rationale provided in chart above.

They only non-directed electives in the curriculum are the cultural enrichment course and social awareness course.

***b. Indicate any hidden prerequisites (instances where, in order to take a program-required course, the student has to take an additional course. Do not include extra courses taken for remedial purposes).***

There are no hidden prerequisite courses in the program.

***2. Has the program been significantly revised since the last review, and if so, how?***

A recent comprehensive review of the curriculum in Fall 2008 by the current Respiratory Care faculty and Advisory Board resulted in a major curriculum clean-up. The curriculum changes addressed several current program design issues that were identified as problematic in the attainment of program outcomes. These issues include:

- Significant increase in program interest and enrollment numbers thus requiring a more discretionary admission process.
- Student retention issues related to the current program schedule offerings both on and off campus that does not require students to complete important pre-requisite courses that have now been determined to be related to student success in the professional sequence.
- Performance of graduates on certification and registry exams has not been consistently at or above the national average.
- Identified problems with the current configuration and number of RESP Courses:
  - Several RESP courses have related content that is currently dispersed among multiple 1-2 credit courses and a total of 25 individual RESP courses. This proposal reflects a reduction of total RESP courses to 17 by combining related content.
  - RESP courses to be retained need modification of course titles, descriptions and/or outcomes to align with new Committee on Accreditation of Respiratory Care (CoARC) programs guidelines and the current program design that encompasses both face-to-face and online modes of delivery. This proposal will align RESP courses with program outcomes to enhance assessment activities for both the program and CoARC.
  - RESP course sequencing issues that have created challenges in the scheduling of clinical experiences for on and off campus students. This proposal will include a consistent scheduling model format for both full and part time students that will maximize preparation for optimal clinical placements.

- RESP course configurations are currently less efficient in terms of the configuration of credits and contact hours. This proposal will reflect lab course configuration changes that will reduce the total number of laboratory courses, while still maintaining the number of contact hours necessary to optimize learning.

The changes to the curriculum include:

- Establishment of a pre-professional sequence of required pre-requisite coursework to: 1) provide students with the general education preparation necessary to be successful in the RESP program and 2) to serve as a way for students to qualify for admission to the professional sequence, in accordance with the CAHS procedure for admission to clinical programs.
- Modify the admission criteria for the program from the current High School or College GPA of 2.5 to include a college GPA of 2.7 as well as the completion of designated pre-requisite course work with minimal course grade requirements for specified courses
  - CHEM 103, BIOL 109 & MATH 110 – minimum grades of B- required.
  - CAHS Core Curriculum courses – minimum grades of C required.
- Establish more rigorous and explicit progression criteria for the program.
- Reorganize the professional sequence courses in a curriculum plan that is more logically organized and internally consistent. This will include:
  - The deletion of 18 current RESP courses that can be combined for a more efficient configuration.
  - The creation of 10 new RESP courses that will replace those deleted to reduce the number of RESP courses overall.
  - The modification of 7 current RESP courses to achieve consistency with newly created courses as well as overall efficiency.
  - An overall reduction of RESP courses from the current 25 to 17 in the new curriculum plan.
  - An overall reduction in laboratory contact hours from 390 to 360.
  - A new program sequence plan that will allow a full time professional sequence of 4 semesters for traditional students who attend at the Big Rapids campus and a part time professional sequence of 7 semesters for nontraditional students who will attend in one of the off campus sites.

**See Appendix B for a copy of Current Curriculum Sheet, Revised Curriculum Sheet Progression Policy and Sample Syllabi.**

**3. Are there any curricular or program changes currently in the review process? If so what are they?**

No.

**4. Are there plans to revise the current program within the next three to five years? If so, what plans are envisioned and why?**

There are no plans to revise the current program at this time.

## **G. Quality of Instruction**

### **1. Discuss student and alumni perceptions of the quality of instruction.**

The essential points of both the alumni and student perception survey were:

1) The majority of respondents indicated that their knowledge of respiratory care and general medical knowledge was adequate. This also mirrored the responses for the majority of respondents indicating that their clinical skills including patient assessment, treatment, and ability to interpret test results was acceptable.

2) Survey results indicate that the majority of respondents believe that the professors are effective classroom and lab teachers and that instruction is based on clearly stated objectives.

- 3) Faculty numbers in class and lab were perceived to be adequate by the majority of respondents.
- 4) A recurring suggestion to strengthen the program was to have more class time. Two of four respondents suggested that face-to-face rather than online courses would have been beneficial.
- 5) Regarding lab physical facilities, the majority of the respondents provided favorable responses. However a slightly larger percentage of students indicated that lab equipment was insufficient as compared to those indicating that it was adequate. The number of students indicating adequacy of variety and supplies for lab was nearly equal to those indicating inadequacies in these areas.
- 6) The majority of respondents indicated that they would recommend FSU's respiratory care program to others considering a career in the field.

**2. Discuss advisory committee and employer perceptions of the quality of instruction.**

The essential points of both the advisory committee and employer perception survey were:

- 1) Employers felt that 68% of Program graduates had the requisite knowledge for the position.
- 2) Employers felt that 69% of Program graduates had the requisite technical ability to function in the position.
- 3) Employers felt that 78% of Program graduates had appropriate communication skills and exhibited a professional demeanor.
- 4) 62% of employers felt the Program produced quality graduates
- 5) The committee members surveyed agreed that the Respiratory Care program prepares quality students for their clinical internship.

**3. What departmental and individual efforts have been made to improve the learning environment, add and use appropriate technology, train and increase the number of undergraduate and graduate assistants, etc.**

Faculty and staff have undergone the following training to ensure an increase in student learning:

- Learner Center Environment: Several training sessions on how to incorporate this practice into present curriculum.
- Ferris Connect Training

**4. Describe the types of professional development faculty have participated in, in efforts to enhance the learning environment (e.g. Writing across the curriculum; Center for teaching and learning, etc.).**

The Respiratory Care faculty have:

- Attended American Association for Respiratory Care meetings
- Completed the FerrisConnect course
- Attended the Michigan Society for Respiratory Care - Educators Seminar
- Attended the Annual MSRC Spring and Fall Conferences
- Attended the Sloan-Kettering Conference for online learning
- Attended FCTL workshop for new faculty

**5. What efforts have been made to increase the interaction of students with faculty and peers? Include such items as developmental activities, seminars, workshops, guest lectures, special events, and student participation in the Honors Program Symposium.**

The program is very dedicated to increasing the interaction of students with faculty and peers. Several activities have been added to the program in order to increase interaction: Respiratory Care Club meetings/activities, Attendance at state respiratory care conferences, Joint-fundraisers and social events such as picnics and football games.

**6. Discuss the extent to which current research and practice regarding inclusive pedagogy and curriculum infuse teaching and learning in this program.**

The program has moved toward a learner centered environment. The classes and labs have been restructured to include case based learning which requires critical thinking activities. Laboratory comprehensive final exams are case based clinical simulations which require the student to analyze the data and make clinical based decisions in their treatment of the patient.

**7. What effects have actions described in (5) and (6) had on the quality of the teaching and learning in the program?**

Faculty and students are more engaged in the learning process. Communication is stronger between faculty and students due to the increased activities. Cased based learning activities prepare the students for the hospital environment of care that they will experience during their internship.

**H. Composition and quality of faculty**

**1. List the names of all tenured and tenure-track faculty by rank.**

Gary Jeromin, MS, RRT	Associate Professor	Tenure Track
Larry McMullin, MS, RRT	Assistant Professor	Tenure Track

**a. Identify their rank and qualifications.**

<b>Gary Jeromin, MA, RRT</b>	<b>Associate Professor</b>	<b>Tenure Track</b>
Masters Degree		
Registered Respiratory Therapist #1596		
Licensed Respiratory Therapist #4401003853 - State of Michigan		

<b>Larry McMullin, MM, RRT, RPFT,</b>	<b>Assistant Professor</b>	<b>Tenure Track</b>
Masters Degree		
Registered Respiratory Therapist # 23016		
Licensed Respiratory Therapist #4401000122 - State of Michigan		

**b. Indicate the number of promotions or merit awards received by program faculty since the last program review.**

All program faculty have been hired within the last three years and have not been eligible for promotion or merit awards.

**c. Summarize the professional activities of program faculty since inception or the last program review (attendance of professional meetings, poster or platform presentations, responsibilities in professional organizations, etc.).**

As previously stated, the Respiratory Care faculty have:

- Attended American Association for Respiratory Care meetings
- Completed the FerrisConnect course
- Attended the Michigan Society for Respiratory Care - Educators Seminar
- Attended the Annual MSRC Spring and Fall Conferences
- Attended the Sloan-Kettering Conference for online learning
- Attended FCTL workshop for new faculty

**See Appendix C for copies of Faculty Vitae**

**2. Workload**

**a. What is the normal, annualized teaching load in the program or department? Indicate the basis of what determines a “normal load”. On a semester-by-semester basis, how many faculty have accepted an overload assignment?**

Faculty have 18 contact hours for a normal teaching load.

**b. List the activities for which faculty receive release time.**

Program faculty receive release time each semester for the following activities:

Program Coordination: .25 release time  
Clinical Coordination: .19 release time

Other projects are evaluated by the dean and release time is given when appropriate. For example, coordinators will receive an additional .12 release time for the two semesters of APR document preparation.

### **3. Recruitment**

#### ***a. What is a normal recruiting process for new faculty?***

Advertisements are placed professional journals and higher education websites.

#### ***b. What qualifications (academic and experiential) are typically required for a new faculty?***

New faculty requirements include:

- 3 years of Respiratory Care experience
- Appropriate CRT credentials and licensure
- Prior Teaching Experience
- A minimum of a Bachelors Degree
  - must obtain Masters Degree to be eligible for tenure

#### ***c. What are the program's diversity goals for both gender and race/ethnicity in the faculty?***

The program does not have a goal for gender or mix of ethnic backgrounds. The best qualified applicant who meets the hiring standard will be employed.

#### ***d. Describe and assess the efforts being made to attain goals in (c).***

The Respiratory Care program is currently fully staffed and not seeking a faculty member at this time. The best qualified applicants will be sought out regardless of gender or ethnic background

### **4. Orientation**

New faculty attend the faculty transition program through the university and are also oriented within the CAHS. New faculty select a tenure committee chair who acts as a mentor to the employee for the first 4 years at the university. Additional CAHS orientation sessions and "best practices seminars" have been incorporated for the 2008-2009 school year.

### **5. Reward Structure**

#### ***a. Describe the reward structure in place in the program/department/college as it relates the program faculty. Indicate the type of reward and eligibility criteria.***

In addition to salary, the faculty are rewarded with departmental and college funds to offset travel to professional meetings. Faculty are encouraged to apply through the Faculty Affairs Committee for CAHS funding. The reward is limited to \$500 for faculty member per year. Faculty members are also encouraged to apply for Timme funding. Departmental incentive funds have been available on a limited basis to offset the cost of travel for professional development.

#### ***b. Does the existing salary structure have an impact on the programs ability to recruit and retain quality faculty?***

The existing salary structure does not have an impact on recruitment and retention.

#### ***c. Is the reward structure currently in place adequate to support faculty productivity in teaching research, and service?***

The reward structure to support faculty productivity in teaching, service, and research is in place. Promotion and Merit is based on these items.

#### ***d. Is enhancing diversity and inclusion part of the reward structure?***

No

## 6. Graduate Instruction

Not applicable, there are no graduate students in the Respiratory Care Program.

## 7. Non-Tenure Track and Adjunct Faculty

**a. Please provide a list for the last academic year of full-time non-tenure track and adjunct faculty who taught in the program.**

Megan Dixon, BS, RRT, AE-C	Full-time Temporary Faculty Program Coordinator	Non-Tenure Track
Cheri Durst BS, RRT	Full-time Temporary Faculty Clinical Coordinator	Non-Tenure Track

**b. What % of program courses is taught by the faculty in (a)? What courses are they teaching?**

Megan Dixon and Cheri Durst teach approximately 18% of the program courses per semester  
Courses taught by Megan Dixon:

- RESP 100** Introduction to Resp Care
- RESP 119** Cardiopulmonary Anatomy & Phys
- RESP 121** Infectious Pulmonary Disorders
- RESP 122** Obstructive Pulmonary Disorders
- RESP 135** Basic Respiratory Care Delivery
- RESP 136** Basic Respiratory Care Delivery Lab
- RESP 143** Basic Respiratory Care Pharmacology
- RESP 165** Respiratory Care Procedures
- RESP 166** Respiratory Care Procedures Lab
- RESP 193** Clinical Practicum 1
- RESP 205** Noninfectious Pulmonary Disease
- RESP 215** Ventilation Concepts

Courses taught by Cheri Durst:

- RESP 100** Introduction to Resp Care
- RESP 135** Basic Respiratory Care Delivery
- RESP 136** Basic Respiratory Care Delivery Lab
- RESP 143** Basic Respiratory Care Pharmacology
- RESP 165** Respiratory Care Procedures
- RESP 166** Respiratory Care Procedures Lab
- RESP 193** Clinical Practicum 1
- RESP 220** Adult Ventilation
- RESP 221** Adult Ventilation Laboratory
- RESP 240** Neonatal/Pediatric Resp Disorders
- RESP 253** Neonatal/Pediatric Resp Care
- RESP 254** Neonatal/Pediatric Resp Care Lab
- RESP 262** Resp Care Credential Exam Review
- RESP 291** Neonatal/Pediatric Clinical
- RESP 292** Adult Critical Care Clinical

**c. Describe the required qualifications (academic and experiential) for faculty listed in (a). Indicate if all faculty have met the criteria, and if not, what is being done to resolve the situation?**

New faculty requirements include:

- 3 years of Respiratory Care experience
- Appropriate CRT credentials and licensure
- Prior Teaching Experience
- A minimum of a Bachelors Degree

**d. Does the program consider the current use of non-tenure track faculty to be appropriate?**

The program does consider the use of non-tenure track faculty with appropriate Bachelor or Masters Degree and a National Registry Credential (Registered Respiratory Therapist - RRT ) along with a current Michigan State Respiratory Therapy license to be appropriate.

**e. If the program is accredited, what position if any does the accrediting body have regarding the use of non-tenured and adjunct faculty?**

The Commission on the Accreditation of Respiratory Care programs (CoARC) makes no recommendations on the use of non-tenured and adjunct faculty in the instruction of students other than to state that the faculty must be credentialed and have qualification that fall within the program's mission.

#### **I. Service to non-majors**

**a. Identify and describe the General Education service courses provided by the program faculty for other departments at FSU.**

The RESP program does not provide service courses to other majors.

**b. Identify and describe any non-General Education service courses or courses required for other programs. Comment on your interaction with the departments or programs for which the courses are provided.**

The RESP program does not provide service courses to other majors.

**c. Discuss the impact of the provision of General Education and non-General Education courses has on the program.**

The RESP program does not provide service courses to other majors.

**d. Does the program plan to increase, decrease, or keep constant the level of service courses?**

The RESP program does not provide service courses to other majors.



## J. Degree program cost and productivity data

### GENERAL INFORMATION

#### STUDENT COSTS

The average annual cost for a Michigan resident to attend Ferris (based upon 2008-09 rates) including tuition, room and board, fees, estimated academic and personal expenses, is \$20,208.

2008-09 Costs	Semester	Year
<b>Undergraduate (Michigan resident)</b>		
Tuition (15 credit hours)	\$4,500	\$9,000
Room and Board (19 meal plan)	\$3,972	\$7,944
<b>Sub Total</b>	<b>\$8,472</b>	<b>\$16,944</b>
Books and Supplies (estimate)	\$550	\$1,100
Personal Expenses (estimate)	\$1,001	\$2,002
Refundable Fees*	\$81	\$162
<b>Total Expenses (estimated)</b>	<b>\$10,104</b>	<b>\$20,208</b>

\*If requested, the Racquet Facility fee, Student Activity fee and Health Center fee will be deleted from the student's account. Cash refunds will only be granted for the Racquet Facility fee and the Student Activity fee if the student's account is paid in full.

<b>Undergraduate (non-resident)</b>		
Tuition	\$7,950	\$15,900
<b>Undergraduate (non-resident MSEP)*</b>		
Tuition	\$6,750	\$13,500

<b>Part-time Student</b>		
Michigan Resident	\$300 per credit hour	
Non-Resident	\$530 per credit hour	
Non-Resident MSEP*	\$450 per credit hour	

<b>Graduate Student</b>		
Michigan Resident	\$403 per credit hour	
Non-Resident	\$604 per credit hour	
Non-Resident MSEP*	\$604 per credit hour	

Professional Tuition	Resident	Non-Resident
Pharmacy Tuition	\$478 per credit hour	\$718 per credit hour
Optometry Tuition	\$488 per credit hour	\$732 per credit hour

Family Apartments	12 month contract
One Bedroom	\$8,254
Two Bedroom	\$9,202
Two Bedroom (townhouse)	\$10,050
Three Bedroom (townhouse)	\$10,972

**Optional Meal Plan**  
Room and Board (12-meal plan) \$7,570  
Other meal plans available for non-traditional and deluxe halls.

\*Students are eligible for the MSEP (Midwest Student Exchange Program) rate if they live in one of the following states: Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota & Wisconsin. This tuition-reduction program is not available for students enrolled in Doctor of Optometry, and Doctor of Pharmacy programs.

### Tuition

Semester	Credits	Cost per Credit	Cost for Semester	Total Cost for year
Fall – Prereq year	14	\$300	\$4,200	
Spring Prereq year	13	\$300	\$3,900	
<b>Total Cost Prereq Year</b>				\$8,100
Fall-1 <sup>st</sup> year	12	\$300	\$3,600	
Spring-1 <sup>st</sup> year	13	\$300	\$3,900	
Summer -1 <sup>st</sup> year	12	\$300	\$3,600	
<b>Total Cost Year one</b>				\$11,100
Fall-2 <sup>nd</sup> year	12	\$300	\$3,600	
Spring- 2 <sup>nd</sup> year	12	\$300	\$3,600	
<b>Total Cost Year Two</b>				\$7,200
<b>Total Degree Cost</b>				\$26,400

**Response to Tuition Cost:** The degree program costing is relative to the equipment intensive labs and required lab/class size to meet the educational competencies required by specialized accreditation.

## Student Credit Hours (SCH), Full Time Equated Faculty, Productivity Report 2008:

### Student Credit Hours

Year	Summer	Fall	Winter	F + W
2004-2005	266.00	430.00	423.00	853.00
2005-2006	505.00	754.00	1065.00	1819.00
2006-2007	838.00	1231.00	1217.00	2448.00
2007-2008	1020.00	1243.00	1166.00	2409.00

### Full Time Equated Faculty

Year	Summer	Fall	Winter	Avg. F + W
2004-2005	1.41	2.32	2.19	2.26
2005-2006	1.83	4.03	5.89	4.96
2006-2007	4.68	6.27	6.20	6.23
2007-2008	4.46	6.71	6.37	6.54

### SCH/FTEF

Year	Summer	Fall	Winter	F + W
2004-2005	188.62	185.41	192.87	378.08
2005-2006	275.77	186.91	180.70	367.61
2006-2007	178.97	196.39	196.29	392.68
2007-2008	228.44	185.15	183.05	368.25

College of Allied Health	SCH/FTEF
Radiography	907.11
Health Care Systems Administration	616.43
Nuclear Medicine	532.16
Dental Hygiene	531.37
Nursing	482.24
Med. Records Information System	462.51
Clinical Lab Sciences	380.42
Respiratory Care	368.25

**Response:** SCH/FTEF will not change significantly for the Respiratory Care program. Respiratory Care program is ranked 8<sup>th</sup> in SCH/FTEF within the College of Allied Health Sciences.

### K. Assessment and evaluation

**1. List and describe what variables are tracked and why when assessing the effectiveness of the program (e.g. mastery of essentials of subject area, graduation rates, employment rates, pass rates on professional exams).**

*See Appendix D for copy of Assessment Plan*

Survey Cycle and Data Collected:

Tool	Date of Data Measurement
Student Program Evaluation	Annually: May
Adjunct Clinical Instructors Survey	Annually: June
Advisory Committee Survey	Annually: June
Faculty Program Evaluation	Annually: June
Retention/Attrition Rates	Annually: June
Program Completion Rates	Annually: June
Analysis of NBRC Scores	Annually: December
Graduate Survey	Annually: June
Employer Survey	Annually: June

**2. Provide trend data for the variables listed in (1). Compare the data to accreditation benchmark standards if applicable, or provide some other type of assessment data.**

**NBRC Annual School Summary Report  
Report as of 06/13/2009  
FERRIS STATE UNIV - #200108**

Exam: CRT							
Graduation Year	Graduates Tested	Total Passing		Passing First Time		Passing Repeaters	
		n	%	n	%	n	%
2008	60	53	88.3%	41	68.3%	12	20.0%
2007	53	43	81.1%	35	66.0%	8	15.1%
2006	31	28	90.3%	24	77.4%	4	12.9%
2005	16	16	100.0%	11	68.8%	5	31.3%
2004	9	9	100.0%	6	66.7%	3	33.3%
2003	9	9	100.0%	3	33.3%	6	66.7%

Exam: CSE							
Graduation Year	Graduates Tested	Total Passing		Passing First Time		Passing Repeaters	
		n	%	n	%	n	%
2008	29	24	82.8%	17	58.6%	7	24.1%
2007	32	28	87.5%	10	31.3%	18	56.3%
2006	22	22	100.0%	12	54.5%	10	45.5%
2005	11	8	72.7%	3	27.3%	5	45.5%
2004	8	6	75.0%	5	62.5%	1	12.5%
2003	7	7	100.0%	2	28.6%	5	71.4%

Exam: WRRT							
Graduation Year	Graduates Tested	Total Passing		Passing First Time		Passing Repeaters	
		n	%	n	%	n	%
2008	32	25	78.1%	15	46.9%	10	31.3%
2007	35	33	94.3%	22	62.9%	11	31.4%
2006	24	22	91.7%	18	75.0%	4	16.7%
2005	11	10	90.9%	5	45.5%	5	45.5%
2004	8	6	75.0%	3	37.5%	3	37.5%
2003	7	7	100.0%	5	71.4%	2	28.6%

**Discussion**

The CRT exam showed the greatest number of students attempting the exam in 6 years and the 2nd highest level of passing (88.3%) for first time attempts compared to the national average 79.31%. The Written RRT exam had the 2nd greatest number of students attempting the exam with the 3rd highest first time pass rate at 46.9% compared to the national average of 70.94%. The last exam, the CSE (Clinical Simulation Exam) had the second greatest number of students attempting the exam in 6 years and the 2nd highest level of passing (58.6%) for first time attempts compared to the national average of 64.25%. Even though the CRT Exam pass rate is above the national average, the written RRT Exam and CSE are below the national average.

**3. Describe how trend data in (2) is used to assess the rigor, breadth, and currency of the degree requirements and curriculum.**

Activity	How trend is used
Graduation/program completion rate (ability to learn and use material)	Rigor and Breadth- If graduation rates fall; the program will update the curriculum to meet the student's needs. Currency – What worth is the RESP program to the community and employers?
Survey graduates (are graduates successful)	Rigor and breadth – Did we provide correct skill level and curriculum needed for graduates to be successful? If graduates are not successful, the program will change the curriculum to meet the graduate's needs. Currency – Are graduates demonstrating terminal outcomes? Are graduates entry level Respiratory Therapists?
Survey employers	Rigor and breadth – Did we provide correct skill level and curriculum

(are graduates employable)	needed for graduates to be successful? If we are not meeting the employers need, the program will change the curriculum to be more relevant for the community. Currency – Are graduates demonstrating terminal outcomes? Are graduates entry level respiratory therapists?
Clinical faculty evaluate student's preparation (are graduates employable)	Rigor and breadth – Did we provide correct skill level and curriculum needed for graduates to be successful in the clinical rotation? Currency – Are graduates demonstrating terminal outcomes? Are graduates entry level respiratory therapists?
Students evaluate clinical experience (are students effective respiratory therapists)	Rigor and Breadth- We can assess if the equipment and resources provided are satisfactory for teaching new respiratory therapists. The program will change the curriculum to meet the need if the students demonstrate the clinical experience is not effective. Currency – Are students learning course stated outcomes? Do students recognize they are learning the outcomes? Can they demonstrate the skills?
NBRC Certification exam evaluation (are students able to use the information taught)	Rigor – How accurately can our student demonstrate skills? Breadth – How many skills can the students demonstrate? How much material can be used critically by the student? Currency – We can measure if the program is providing the skills necessary to fulfill terminal and course outcome goals.
Survey current students (are students needs being met)	Currency – Are students learning course stated outcomes? Do they recognize they are learning the outcomes? Can they demonstrate the skills?
Adjunct instructor survey (are students developing the mastery skills they need)	Rigor and breadth – Did we provide correct skills level and curriculum needed for graduates to be successful? Currency – Are graduates demonstrating terminal outcomes? Are graduates entry level respiratory therapists? Do graduates demonstrate professional and ethical behaviors?
Advisory committee meeting (is the program meeting the need of the community)	Rigor and breadth – Did we provide correct skills level and curriculum needed for graduates to be successful? Currency – are graduates demonstrating terminal outcomes? Are graduates entry level respiratory therapists?
Monitor program attrition (leavers) (Is the program meeting the needs of the students)	Rigor and breadth-Is the program serving the needs of the student population? If graduation rates fall; the program will update the curriculum to meet the student's needs. Do entrance requirements need to be increased to make incoming students more successful? Currency –Are students learning course stated outcomes? Can they demonstrate the skills?

**4. Describe how the data in 2 is being used to assess the extent to which program goals are being met.**

Based on the results of the data above, the following changes have been made to the curriculum and teaching pedagogy in the Respiratory Care program:

- Lecture and teaching techniques have been improved.
- Ferris Connect enhancement has been implemented.
- Communication between students and faculty has improved.
- Communication between faculty and clinical sites has improved.

## **L. Administration effectiveness**

### **1. *Discuss the adequacy of administrative and clerical support for the program.***

The administrative and clerical support for the Respiratory Care program is excellent.

The program has a dedicated department head and secretary within the Clinical Laboratory, Respiratory Care and Health Care Systems Administration Department. The dean has been open to many ideas and demonstrates a willingness to work with the department on meeting its needs.

### **2. *How does the condition of the current facilities impact program delivery.***

The facilities in the building are excellent. The recently remodeled classrooms have state of the art technology that enhances the learning environment. The respiratory care lab was recently remodeled which helps in the recruitment of new students. Funds for new pieces of equipment have been secured by the dean and a new SIM Man provides the ability for students to become competent in clinical scenarios prior to internship.

### **3. *Are the teaching and class schedules effectively and efficiently prepared?***

Yes. The lab and lecture schedules meet the needs of the student and faculty members.

### **4. *Are students able to take the courses they need in a timely manner?***

All Respiratory Care students are able to take the courses they need in a timely manner.

## **Section 4: Facilities and Equipment**

### **A. Instructional environment**

There are 2 dedicated labs for the program, one is located on the Big Rapids campus and the other one is located on the Grand Rapids campus. The Big Rapids lab has recently been renovated and provides adequate space for teaching, lab activities and equipment storage. The Grand Rapids lab has minimally acceptable space in which to provide these services to the students and to store equipment. All other cohorts utilize local community college nursing labs. These are used most often on the weekend when not being utilized by the host site. These labs tend to provide adequate space for teaching and lab activities but provide minimal opportunity for storage of equipment.

Both of the dedicated labs have adequate technology to provide appropriate classroom instruction and offer a variety of learning activities. Unfortunately this is not the case with the offsite classrooms. It is necessary for the dedicated labs to provide equipment and supplies for other cohort sites. This requires the program to purchase additional equipment and supplies to transport and/or ship to the off campus sites.

The program routinely rents larger, more costly pieces of equipment such as ventilators. This is done to provide students the opportunity to work with state of the art equipment that is currently being utilized in the field. On occasion older model ventilators are donated for use in the labs. These are useful in teaching ventilator concepts but often do not provide graphic monitors and current technology. This equipment is difficult to transport to off campus sites due to size and storage requirements.

#### ***1. Are current classrooms, labs, and technology (both on-campus and at off-site locations) adequate?***

All classrooms have been updated and now have “smart stations”. This has been a wonderful addition to the classroom thus allowing many new functions and delivery methods to be used when teaching. The Big Rapids lab was recently remodeled to meet the needs of the program.

#### ***2. How does the condition of current facilities impact program delivery?***

Current conditions in the classrooms are excellent and enhance program delivery.

#### ***3. Describe the program’s projected needs with respect to instructional facilities.***

Instructional facilities in the college meet the needs of the program.

#### ***4. Describe current plans for facilities improvements and indicate their status.***

Currently the program has no plans for facilities improvements.

#### ***5. Describe how proposed changes or improvements to facilities would enhance program delivery.***

Conditions in the instructional environment meet the needs of the program.

### **B. Computer access and availability**

#### **1. Outside of computers in faculty and staff offices, identify the computing resources (hardware and software) that are allocated to the program.**

The Respiratory Care Program utilizes 6 computers in the classroom and lab. The following are all the computing resources for the Respiratory Program:

- 1 Computer/Audio-Visual Center in the Respiratory Care classroom
- 1 computer with proprietary software to interact and operate the Laerdal Sim-Man clinical simulator
- 1 computer to operate the MedGraphics Pulmonary Function Body Box
- 1 computer to operate the HewlettPackard EKG Stress Testing Treadmill
- 2 computer stations to run clinical simulation testing

**2. Discuss how these resources are used.**

The classroom computer which has been equipped with web access is used during each lecture to provide a rich stream of audio-visual media. There are also two computers in the lab used to provide clinical simulation testing. Another lab computer is used with Sim-Man to provide a realistic based clinical scenario. Still another computer is exclusively dedicated to running the Pulmonary Function Equipment. And lastly one computer is dedicated to run a stress EKG treadmill system.

**3. Discuss the adequacy of these resources and identify needed additional resources.**

The resources are adequate and no further resources are needed.

**4. Does an acquisition plan to address these needs currently exist? Describe the plan. Has it been included in the department or college's planning documents?**

There is no written acquisition plan for these equipment needs. However, the program is eligible for vocational funding and annually updates their request for equipment.

**5. Discuss the efficacy of online services (including FerrisConnect) available to the program.**

Ferris Connect has been a very efficient means for the program to enhance the delivery of every course in the professional sequence.

**6. Discuss the adequacy of computer support, including the support for on-line instruction if applicable.**

The program has received adequate computer support and has experienced no difficulties with the on-line system.

**C. OTHER INSTRUCTIONAL TECHNOLOGY**

**1. Identify other types of instructional technology resources that are allocated or available to the program.**

The Respiratory Care lab has the following technology:

- Puritan-Bennett 7200 Mechanical Ventilator
- Cardinal Health AVEA Mechanical Ventilator

**2. Discuss how these resources are used.**

The program uses the above resources to educate students on equipment they will be using in the field of Respiratory Care. All items are essential in training students for their careers.

**3. Discuss the adequacy of these resources and identify needed additional resources.**

The resources are minimally adequate and must be supplemented with rented ventilators. However, it would be more beneficial to purchase additional ventilators to have on site.

**4. Does an acquisition plan to address these needs currently exist? Has it been included in the department or colleges planning documents?**

Ventilator rental expenses remain a priority on the vocational fund "wish list" with the hope that the items will be eventually purchased.

**5. Discuss the impact of adequacy of other types of instructional technology resources and support of these resources on the program.**

Rental ventilators are costly and present challenges when they malfunction during lab. Since there are no backups available, students lose valuable practice time and experience.

**D. Library resources**

**1. Discuss the adequacy of the print and electronic and other resources available through FLITE for the program.**

The library is fully stocked with material on Respiratory Care. New book purchases are shared with the faculty and staff for input and meet the needs of the faculty and students.

**2. Discuss the service and instruction availability provided by the Library faculty and staff with respect to the needs of the program.**

The services provided by the library faculty and staff have been wonderful.

**3. Discuss the impact of the budget allocation provided by FLITE to your program. Is the budget allocation adequate? Explain.**

The library has met all the needs of the program

#### Instructional Resources – Library

The mission of the Ferris Library for Information, Technology, and Education (FLITE), is to “promote and advance Ferris State University's present and future teaching, learning, research and informational inquiry by providing high quality collections, services and instruction.” The library strives to fulfill its mission and provides a vast number of information resources to the Ferris State University community that include an impressive collection of print resources that numbers over 350,000 as well as access to a vast array of online resources, including access to over 36,000 journals online. The formally trained librarians at FLITE perform a central role in helping the library to fulfill its mission, and are available to assist library patrons with their queries through in-person consultations, as well as via phone, e-mail, or chat reference services. Librarians also serve as liaisons to the university programs, with the health sciences librarian serving as the direct liaison to the respiratory care program. The library liaison collaborates with the respiratory care faculty to insure that proper library resources are being selected to support the curriculum, and provides library support services to the faculty and students of the program, including library instruction sessions. The distance education librarian also works closely with the health sciences librarian to facilitate off-campus students’ and faculties’ use of library resources.

Relevant books, journals, and databases are available for the respiratory care program, with many of these resources being accessible online to facilitate use. Beyond the aforementioned information resources, the library facility houses many useful tools, including computers with high-speed Internet connections, wireless connectivity capabilities, private and group study rooms, and instructional studios that may be utilized for library instruction sessions or regular classroom sessions when a computer lab is desired. A discussion of some of the information resources made available by FLITE follows.

**Books:** An annual budget is allotted specifically towards the purchase of books for the respiratory care program. Input from the faculty is taken into account when selecting books, as is the allied health core list, *Doody's Core Titles*, that recommends central books for health and medical libraries. As a means of assessing the strength of the respiratory care book collection, library holdings were compared against the 2008 *Doody's Core Titles* list for respiratory therapy. As of April 2009, FLITE holds 100% of the 2008 *Doody's Core Titles* recommended “first purchase” books and 91% of the overall titles recommended for respiratory therapy that meet criteria for inclusion at the library (pocket books were excluded). Newer editions of the recommended titles, 1 edition older than the recommended title, or the exact edition recommended by *Doody's Core Titles* were counted towards fulfilling the core list’s recommendations, as were electronic books meeting the same criteria. In addition, there are many relevant books available online through the library’s subscriptions to e-books through vendors such as *ebrary*, *NetLibrary*, and *Springer*. *Ebrary* alone contains over 30,000 full-text books that enhances the library’s collection and resources available to students and faculty. Also, an online collection of health and medical reference books is available through *Stat!Ref*, as are many other medical reference books that may be found from the library’s Online Reference Resources collection, available at:



<http://library.ferris.edu/electrorefnew.html>. More online reference books are being selected on an intermittent basis that further enhances the information resources available to the university community.

**Journals:** The library provides access to nearly 37,000 most of which are online. A partial list of journals with online availability relevant to the respiratory care program is below. Some titles have additional print availability, in addition to online availability.

<b>Journal Title</b>	<b>Availability Online</b>	<b>Notes</b>
Allergy	1996-	
American journal of physiology. Lung cellular and molecular physiology	1997-	one year embargo
American journal of respiratory and critical care medicine : an official journal of the American Thoracic Society, medical section of the American Lung Association.	1997-	
American review of respiratory disease	1997-	
Asthma	1996-2006	
BMC pulmonary medicine	2001-	
Chest official publication of the American College of Chest Physicians.	1935-	
Chronic respiratory disease.	2004-	
Clinical Medicine : Circulatory, Respiratory and Pulmonary Medicine	2007-	
Current Allergy and Asthma Reports	2001-	
European respiratory journal : official journal of the European Society for Clinical Respiratory Physiology.	1994-	18 month embargo
European respiratory review : an official journal of the European Respiratory Society.	2005-	
FOCUS: Journal for Respiratory Care Managers and Educators	2000-2003	
FOCUS: Journal for Respiratory Care & Sleep Medicine	2003-	
Heart & Lung	1995-	
Heart, lung & circulation.	2000-	
Indian journal of allergy asthma and immunology	2001-	
Indian journal of chest diseases & allied sciences.	2000-	
Influenza and Other Respiratory Viruses	2007-	
Internet journal of asthma, allergy and immunology	1999-	
Internet journal of pulmonary medicine	1997-	
Journal of aerosol medicine and pulmonary drug delivery	2007-	
Journal of applied physiology.	1996-	1 year embargo
Journal of applied physiology: Respiratory, environmental and exercise physiology.	1996-	1 year embargo
Journal of respiratory diseases.	1999-	
Lung an international journal on lungs, airways, and breathing.	1997-	
Open Respiratory Medicine Journal	2007-	
Paediatric respiratory reviews.	2000-	
Pediatric asthma, allergy & immunology.	2007-	
Pediatric pulmonology.	1996-	

<b>Primary care respiratory journal : journal of the General Practice Airways Group.</b>	1997-
<b>Proceedings of the American Thoracic Society.</b>	2004-
<b>Pulmonary Perspectives</b>	2002-2005
<b>Pulmonary pharmacology &amp; therapeutics</b>	1997-
<b>Respiration physiology.</b>	1995-2002
<b>Respiratory care : the official journal of the American Association for Respiratory Therapy.</b>	2003-
<b>Respiratory medicine. COPD update</b>	2005-
<b>Respiratory medicine.</b>	1995-
<b>Respiratory physiology &amp; neurobiology.</b>	2002-
<b>Respiratory research.</b>	2000-
<b>Respiratory therapeutics week</b>	2003-
<b>Respirology : official journal of the Asian Pacific Society of Respirology.</b>	1996-
<b>RT.</b>	1998-
<b>Seminars in respiratory and critical care medicine.</b>	
<b>Sleep &amp; breathing = Schlaf &amp; Atmung.</b>	1999-
<b>Tanaffos : Journal of Respiratory Disease, Thoracic Surgery, Intensive care and Tuberculosis</b>	2002-
<b>Therapeutic advances in respiratory disease</b>	2007-

**Databases:** Databases relevant to respiratory care span the subject areas of:

- general and multidisciplinary resources
- health and medical resources
- newspaper and news service resources

Databases with relevant subject information that can be accessed through the Health and Medical Resources link include:

<b>CINAHL</b>	<b>Lexis-Nexis Academic Universe</b>
<b>Cochrane Library</b>	<b>Medline</b>
<b>Drug Facts &amp; Comparisons</b>	<b>Natural Medicines Comprehensive Database</b>
<b>Health and Wellness Resource Center</b>	<b>PubMed</b>
<b>Health Reference Center</b>	<b>ScienceDirect</b>
<b>Health Sciences (Sage Full-Text)</b>	<b>STAT!Ref: Electronic Medical Library</b>

Based on the information presented above regarding available information resources for the respiratory care program, it appears that both the library holdings and budget allocation to support the respiratory care program are sufficient. With the availability of the allied health librarian to provide library instruction, both students and respiratory care faculty can avail themselves of tutelage as needed. Overall, library services and holdings to support the respiratory care program are considered to be satisfactory.

## **Section 5: Conclusion**

### **A. Relationship to FSU Mission**

The Respiratory Care program strives to uphold the University and Program Mission Statement. The program uses the most innovative teaching and learning techniques available to remain competitive in the field. The program also continually assesses and makes improvements upon the current curriculum and program structure.

### **B. Program Visibility and Distinctiveness**

The Respiratory Care program is unique in respect to the overall structure and format. The off-campus cohorts and online courses are a testament to the willingness of the program to meet the needs of the students and profession. The structure of this program allows many non-traditional and off-site students who may otherwise not have been able to pursue this career path to receive an education. The program offers the student the ability to take classes on-line. Students may also complete a Bachelors of Science degree at Ferris which is appealing to employers and students. Ferris graduates are sought after because of their demonstrated skill level upon graduation as compared to other respiratory care program graduates in the state.

### **C. Program value**

The value of the Ferris Respiratory Care Program is to provide high quality respiratory therapists to meet the national shortage of technologists. Employer surveys reflect that Ferris Respiratory Care graduates are filling the needs of their community.

### **D. Enrollment**

Enrollment in the Respiratory Care Program is very strong. The number of pre-respiratory students has increased over the past five years. Current enrollment is at an all time high of 206 students. The enrollment presents challenges for clinical internship placement for the program.

### **E. Characteristics, Quality and Employability of students**

Ferris graduates are well prepared and have high job placement rates. Ferris graduates fair very well against graduates from other programs. Most employers rate Ferris Respiratory Care students as prepared for the job market. Responding employers are very happy with the FSU graduate they have employed.

The FSU Respiratory Care students and graduates:

- Display ethical and professional behavior
- Demonstrate strong psychomotor skills
- Demonstrate strong critical thinking skills

### **F. Quality of Curriculum and Instruction**

The program will continue to assess the program goals, outcomes and curriculum and make the necessary changes based on various program measurements. Faculty are confident that the recent program revisions will increase retention in the program and increase the pass rates on the registry.

### **G. Composition and Quality of the Faculty**

The Ferris State University Respiratory Care program employs four dedicated respiratory care faculty which includes two full-time temporary faculty. Each faculty member has prior teaching experience and has worked in a variety of areas within the field of respiratory care. The faculty members are dedicated and determined to make this program a leader in respiratory care education in Michigan.

## Appendix A Labor Market Analysis and Citations

### Labor Market Analysis

The following tables present summary data as presented on the Career InfoNet Occupation Information website, [http://www.careerinfonet.org/occ\\_intro.asp?id=1,&nodeid=1#profile](http://www.careerinfonet.org/occ_intro.asp?id=1,&nodeid=1#profile), which aggregates information from national and state government agencies.

#### State and National Wages

Location	Pay Period	2007				
		10%	25%	Median	75%	90%
United States	Hourly	\$17.62	\$20.57	\$24.07	\$28.38	\$32.06
	Yearly	\$36,600	\$42,800	\$50,100	\$59,000	\$66,700
Michigan	Hourly	\$19.00	\$20.92	\$23.53	\$26.81	\$29.48
	Yearly	\$39,500	\$43,500	\$48,900	\$55,800	\$61,300

#### State and National Trends

United States	Employment		Percent Change	Job Openings <sup>1</sup>
	2006	2016		
Respiratory therapists	102,400	125,600	+ 23 %	3,820
Michigan	Employment		Percent Change	Job Openings <sup>1</sup>
	2006	2016		
Respiratory therapists	3,600	4,310	+ 20 %	120

#### Distribution of Educational Attainment

Occupation	Percent of employees aged 25 to 44 in the occupation whose highest level of educational attainment is-		
	High School or Less	Some College	Bachelor Degree or More
Respiratory therapists	1.1%	71.2%	27.7%
Health Diagnosing and Treating Practitioners	1.3%	11.4%	87.4%
Healthcare Practitioners and Technical	9.9%	31%	59.1%
Total, All Occupations	38.8%	29.1%	32.1%

#### Labor Market Analysis Citations

American Association for Respiratory Care. (2006). **Study Shows Significant Change Over Five Years. Retrieved February 25, 2009, from** [http://www.aarc.org/headlines/human\\_resource\\_study06/](http://www.aarc.org/headlines/human_resource_study06/).

Bureau of Labor Statistics, U.S. Department of Labor. (2008). *Occupational outlook handbook, 2008-09 edition*. Retrieved January 20, 2009, from <http://www.bls.gov/oco/ocos084.htm>

State of Minnesota. (2008). *Career InfoNet occupation information: Occupation profile for respiratory therapists: Michigan*. Retrieved January 20, 2009, from [http://www.careerinfonet.org/occ\\_rep.asp?next=occ\\_rep&Level=&optstatus=111111111&jobfam=29&d=1%2C&nodeid=2&socode=291126&stfips=26&x=55&y=4](http://www.careerinfonet.org/occ_rep.asp?next=occ_rep&Level=&optstatus=111111111&jobfam=29&d=1%2C&nodeid=2&socode=291126&stfips=26&x=55&y=4)

## Appendix B Curriculum, Progression Policy and Sample Syllabi

### FORM D - CURRENT

#### Ferris State University Respiratory Care Program Academic Requirements

<b>Respiratory Major – 48 Credits Required</b>			
<b>PREFIX</b>	<b>NUM</b>		<b>CR</b>
RESP	100	Introduction to Respiratory Care (none)	1
RESP	119	Cardiopulmonary Anatomy and Physiology (none)	2
RESP	121	Infectious Disorders (none)	1
RESP	122	Obstructive Pulmonary Disorders (none)	1
RESP	135	Basic Respiratory Care Delivery (co-requisite RESP 136)	2
RESP	136	Basic Respiratory Care Delivery Laboratory (co-requisite RESP 135)	3
RESP	143	Basic Respiratory Pharmacology (none)	1
RESP	165	Respiratory Care Procedures (RESP 136; Co-requisite RESP 166)	2
RESP	166	Respiratory Care Procedures Laboratory (Co-requisite RESP 165)	2
RESP	193	Clinical Practicum 1 (Departmental Permit)	3
RESP	205	Non-infectious Pulmonary Disease (none)	1
RESP	210	Basic Diagnostics (RESP 122; co-requisite RESP 211)	2
RESP	211	Basic Diagnostics Laboratory (Co-requisite RESP 210)	2
RESP	215	Ventilation Concepts (RESP 211)	1
RESP	220	Adult Ventilation (Co-requisite RESP 221)	1
RESP	221	Adult Ventilation Laboratory (Co-requisite RESP 220)	2
RESP	235	Advanced Cardiopulmonary Diagnostics (RESP 211; Co-requisite RESP 236)	1
RESP	236	Advanced Diagnostics Laboratory (Co-requisite RESP 235)	2
RESP	240	Neonatal-Pediatric Respiratory Disorders (none)	1
RESP	242	Advanced Respiratory Care Pharmacology (RESP 143)	1
RESP	253	Neonatal-Pediatric Respiratory Care (Co-requisite RESP 254)	1
RESP	254	Neonatal-Pediatric Respiratory Care Laboratory (Co-requisite RESP 253)	2
RESP	262	Respiratory Care Credentialing Examination Review (Department Permit)	1
RESP	291	Neonatal-Pediatric Clinical (Departmental Permit)	3
RESP	292	Adult Critical Care Clinical (RESP 166)	9
<b>Communication Competence – 9 Credits Required</b>			
COMM	221 105	Small Group Decision Making (none) <u>OR</u> Interpersonal Communication (none)	3
ENGL	150	English 1 (ENGL 074 or minimum score of 14 on ACT or 370 on SAT)	3
ENGL	250	English 2 (ENGL 150 with a grade of C- or better)	3
<b>Quantitative Competence</b>			
MATH	110	Fundamentals of Algebra or ACT subscore of 19 or MATH SAT of 460 (prerequisite to MATH 110 is MATH 010 with a grade of C- or better, or 15 on ACT or 350 on SAT)	4
<b>Scientific Understanding – 7 Credits Required</b>			
BIOL	109	Basic Human Anatomy and Physiology	4
CHEM	103	Preparatory Chemistry (MATH 110)	3
<b>Social Awareness – 3 Credits Required</b>			
		Social Awareness Foundations Course	3
<b>Cultural Enrichment – 3 Credits Required</b>			
		Cultural Enrichment Course	3

<b>Core Curriculum Health Sciences – 6 Credits Required</b>			
CCHS	101	Orientation to Health Care (none)	3
CCHS	102	Safety Issues in Health Care (none)	1
CCHS	103	Clinical Skills for Health Care Providers (none)	1
MRIS	102	Medical Vocabulary	1
<b>Program Admission &amp; Progression Requirements</b>			
<ul style="list-style-type: none"> <li>Students are encouraged- but not required- to complete MATH 110, CHEM 103 and BIOL 109 with a “C” or better grade before they begin the professional sequence.</li> <li>79 Credits required for Graduation</li> </ul>			

**FORM D - CURRENT**

**FERRIS STATE UNIVERSITY**  
**COLLEGE OF ALLIED HEALTH SCIENCES**  
**RESPIRATORY CARE PROGRAM: ON-CAMPUS SCHEDULE**  
**FALL YEAR 1**

BIOL 109	Basic Human Anatomy and Physiology (None)	4
COMM 105	Interpersonal Communication (None)	3
	OR	
COMM 221	Small Group Decision Making (None)	
ENGL 150	English 1 (ENGL 074 or minimum score of 14 on ACT or 370 on SAT)	3
MATH 110	Fundamentals of Algebra or ACT MATH sub-score of 19 or MATH SAT of 460 (Prerequisite to MATH 110 is MATH 010 with a grade of C- or better, or 15 on ACT or 350 on SAT)	0
RESP 100	Introduction to Respiratory Care (None)	1
RESP 119	Cardiopulmonary Anatomy and Physiology (None)	2
RESP 121	Infectious Pulmonary Disorders (None)	1

**14 cr**

**SPRING YEAR 1**

CCHS 102	Safety Issues in Health Care (None)	1
CCHS 103	Clinical Skills for Health Care Providers (None)	1
CHEM 103	Preparatory Chemistry (Math 110)	3
MRIS 102	Medical Vocabulary (None)	1
RESP 122	Obstructive Pulmonary Disorders (None)	1
RESP 135	Basic Respiratory Care Delivery (Co-requisite RESP 136)	2
RESP 136	Basic Respiratory Care Delivery Laboratory (Co-requisite RESP 135)	3
RESP 143	Basic Respiratory Pharmacology (None)	1

**13 cr**

**SUMMER YEAR 1**

RESP 165	Respiratory Care Procedures (RESP 136; Co-requisite RESP 166)	2
RESP 166	Respiratory Care Procedures Laboratory (Co-requisite RESP 165)	2
RESP 193	Clinical Practicum 1 (Departmental Permit)	3
RESP 205	Non-infectious Pulmonary Disease (None)	1
RESP 210	Basic Diagnostics (RESP 122; Co-requisite RESP 211)	2
RESP 211	Basic Diagnostics Laboratory (Co-requisite RESP 210)	2

**12 cr**

**FALL YEAR 2**

RESP 215	Ventilation Concepts (RESP 211)	1
RESP 235	Advanced Cardiopulmonary Diagnostics (RESP 211; Co-requisite RESP 236)	1
RESP 236	Advanced Diagnostics Laboratory (Co-requisite RESP 235)	2
RESP 240	Neonatal-Pediatric Respiratory Disorders (None)	1
RESP 242	Advanced Respiratory Care Pharmacology (RESP 143)	1

RESP 253	Neonatal-Pediatric Respiratory Care (Co-requisite RESP 254)	1
RESP 254	Neonatal-Pediatric Respiratory Care Laboratory (Co-requisite RESP 253)	2
RESP 291	Neonatal-Pediatric Care Clinical (Departmental Permit)	3

**13 cr**

**SPRING YEAR 2**

RESP 220	Adult Ventilation (Co-requisite RESP 221)	1
RESP 221	Adult Ventilation Laboratory (Co-requisite RESP 220)	2
RESP 292	Adult Critical Care Clinical (RESP 166)	9

**12 cr**

**SUMMER YEAR 2**

CCHS 101	Orientation to Health Care (None)	3
ENGL 250	English 2 (ENGL 150 with a grade of C- or better)	3
RESP 262	Respiratory Care Credentialing Examination Review (Departmental permit)	1
	Cultural Enrichment Elective	3
	Social Awareness Elective	3

**13 cr**

**FORM D Effective Fall 2010 Revised Curriculum**

**Ferris State University**

**Respiratory Care Program Academic Requirements**

<b>PREFIX</b>	<b>NUM</b>	<b>Respiratory Major – 48 Credits Required</b>	<b>CR</b>
RESP	100	Introduction to Respiratory Care (Admission to Respiratory Care Program)	1
RESP	119	Cardiopulmonary Anatomy and Physiology (Admission to Respiratory Care Program)	3
RESP	125	Pharmacology for Respiratory Care (Admission to Respiratory Care Program)	3
RESP	145	Respiratory Procedures (Admission to Respiratory Care Program)	3
RESP	146	Respiratory Procedures Laboratory (Admission to Respiratory Care Program)	2
RESP	162	Respiratory Pathophysiology (RESP 100, 119, 125,145,146)	2
RESP	171	Cardiorespiratory Diagnostics (RESP 100, 119, 125,145,146)	3
RESP	172	Cardiorespiratory Diagnostics Laboratory (RESP 100, 119, 125,145,146)	2
RESP	184	Principles of Mechanical Ventilation (RESP 100, 119, 125,145,146)	2
RESP	193	Clinical Practicum 1 (RESP 100, 119, 125,145,146)	3
RESP	220	Adult Critical Care (RESP 162, 171,171,184,193)	2
RESP	221	Adult Critical Care Laboratory (RESP 162, 171,171,184,193)	2
RESP	292	Clinical Practicum 2 (RESP 162, 171,171,184,193)	8
RESP	230	Care of the Neonatal- Pediatric Patient (RESP 220, 221,292)	3
RESP	231	Care of the Neonatal- Pediatric Patient Laboratory (RESP 220, 221,292)	2
RESP	262	Respiratory Care Credentialing Examination Review (RESP 220, 221,292)	2
RESP	293	Clinical Practicum 3 (RESP 220, 221,292)	5
		<b>Communication Competence – 9 Credits Required</b>	
COMM	221 105	Small Group Decision Making (none) <u>OR</u> Interpersonal Communication (none)	3
ENGL	150	English 1 (ENGL 074 or minimum score of 14 on ACT or 370 on SAT)	3
ENGL	250	English 2 (ENGL 150 with a grade of C- or better)	3
		<b>Quantitative Competence – Proficiency Required</b>	
MATH	110	Fundamentals of Algebra or ACT subscore of 19 or MATH SAT of 460 (prerequisite to MATH 110 is MATH 010 with a grade of C- or better, or 15 on ACT or 350 on SAT)	(4)

<b>Scientific Understanding – 7 Credits Required</b>			
BIOL	109	Basic Human Anatomy and Physiology	4
CHEM	103	Preparatory Chemistry (MATH 110)	3
<b>Social Awareness – 3 Credits Required</b>			
		Social Awareness Foundations Course	3
<b>Cultural Enrichment – 3 Credits Required</b>			
		Cultural Enrichment Course	3
<b>Core Curriculum Health Sciences – 5 Credits Required</b>			
CCHS	101	Orientation to Health Care (none)	3
CCHS	102	Safety Issues in Health Care (none) or proficiency	(1)
CCHS	103	Clinical Skills for Health Care Providers (none) or proficiency	(1)
MRIS	102	Medical Vocabulary (none) or proficiency	(1)
<b>Program Admission &amp; Progression Requirements</b>			
<ul style="list-style-type: none"> <li>• College GPA of 2.7 or higher required for Admission</li> <li>• Completion of qualifying coursework or competency required for Admission: Math Competency, BIOL 109, CHEM 103, MRIS 102 or proficiency, ENGL 150, CCHS 102 &amp; CCHS 103</li> <li>• Students must earn a “B-” or better in no more than two attempts in: BIOL 109, CHEM 103 &amp; MATH 110</li> <li>• Students must earn a “C” or better in CAHS Core Curriculum Requirements</li> <li>• Students must earn a “C” or better in no more than two attempts in all RESP Courses</li> <li>• Students who return to the University after an interrupted enrollment (not including summer semester) must meet the requirements of the curriculum which are in effect at the time of their return, not the requirements which were in effect when they were originally admitted</li> <li>• 72 Credits Required for Graduation</li> </ul>			

**FORM D Effective Fall 2010 Revised Curriculum**

**FERRIS STATE UNIVERSITY  
COLLEGE OF ALLIED HEALTH SCIENCES  
RESPIRATORY CARE PROGRAM: ON-CAMPUS SCHEDULE  
Pre-Respiratory Semester 1 (Suggested Schedule)**

<b>Course Num</b>	<b>Course Title (Pre-Requisites)</b>	<b>Credits</b>
BIOL 109*	Basic Human Anatomy & Physiology (none)	4
ENGL 150*	English 1 (ENGL 074 or minimum score of 14 on ACT or 370 on SAT)	3
MRIS 102*	Medical Vocabulary (none)	1
MATH Prof*	MATH 110 or Proficiency (ACT sub-score of 19 or SAT sub-score of SAT)	(4)
COMM 105 or COMM 221 or COMM 121	Interpersonal Communication (none) or Small Group Decision-making (none) or Public Speaking (none)	3
SA Elective	Social Awareness Foundation Elective (none)	3
<b>Total Credits</b>		<b>14</b>

**Pre-Respiratory Semester 2 (Suggested Schedule)**

<b>Course Num</b>	<b>Course Title (Pre-Requisites)</b>	<b>Credits</b>
CHEM 103*	Preparatory Chemistry (none)	3
CCHS 101	Orientation to Health Care (none)	3
CCHS 103*	Clinical Skills (none)	1
ENGL 250	English 2 (ENGL 150)	3
CE Elective	Cultural Enrichment Elective	3
<b>Total Credits</b>		<b>13</b>

*\*Required or in progress to apply for admission to the Respiratory Professional Sequence*



### Respiratory Professional Sequence Semester 1 (Fall)

Course Num	Course Title (Pre-Requisites)	Credits
RESP 100	Introduction to Respiratory Care (Admission to Professional Sequence)	1
RESP 119	Cardiopulmonary Anatomy & Physiology (Admission to Professional Sequence)	2
RESP 125	Pharmacology for Respiratory Care (Admission to Professional Sequence)	3
RESP 145	Respiratory Procedures (Admission to Professional Sequence)	3
RESP 146	Respiratory Procedures Laboratory (Admission to Professional Sequence)	2
CCHS 102	Safety Issues in Health Care (none)	1
<b>Total Credits</b>		<b>12</b>

### Respiratory Professional Sequence Semester 2 (Spring)

Course Num	Course Title (Pre-Requisites)	Credits
RESP 162	Respiratory Pathophysiology (RESP 100, 119, 125, 145, 146)	3
RESP 171	Cardiorespiratory Diagnostics (RESP 100, 119, 125, 145, 146)	3
RESP 172	Cardiorespiratory Diagnostics Lab (RESP 100, 119, 125, 145, 146)	2
RESP 184	Principles of Mechanical Ventilation (RESP 100, 119, 125, 145, 146)	2
RESP 193	Clinical Practicum 3 (RESP 100, 119, 125, 145, 146)	3
<b>Total Credits</b>		<b>13</b>

### Respiratory Professional Sequence Semester 3 (Summer)

Course Num	Course Title (Pre-Requisites)	Credits
RESP 220	Adult Critical Care (RESP 162, 171, 172, 184, 193)	2
RESP 221	Adult Critical Care laboratory (RESP 162, 171, 172, 184, 193)	2
RESP 292	Clinical Practicum 2 (RESP 162, 171, 172, 184, 193)	8
<b>Total Credits</b>		<b>12</b>

### Respiratory Professional Sequence Semester 4 (Fall)

Course Num	Course Title (Pre-Requisites)	Credits
RESP 230	Care of the Neonatal-Pediatric Patient (RESP 220, 221, 292)	3
RESP 231	Care of the Neonatal-Pediatric Patient Laboratory (RESP 220, 221, 292)	2
RESP 262	Respiratory Care Credentialing Exam Review (RESP 220, 221, 292)	2
RESP 293	Clinical Practicum 3 (RESP 220, 221, 292)	5
<b>Total Credits</b>		<b>12</b>

#### Respiratory Care Program Progression Policy

##### Program Progression

- A grade of “C” or higher is required for all Respiratory Program requirements.
  - Any student receiving less than a “C” in one Respiratory course must stop the Respiratory sequence and repeat the course the next time it is offered, if a seat is available.
  - A student receiving a grade of less than a “C” in any two Respiratory courses (or two unsuccessful attempts in the same RESP course) will be dismissed from the program.
- If at any time a student’s GPA falls below 2.0, he/she will be dismissed from the Respiratory Program.
- All general education requirements must be completed before admission to the Respiratory Program.
- Any student with a conviction record is cautioned that a criminal record may prohibit or limit progression in the program, clinical placement, future employment and licensure.

RESP 122 Obstructive Pulmonary Disorders  
Ferris State University  
College of Allied Health Sciences  
Department of Clinical Lab, Respiratory Care and Health Administration  
Spring 2009

1 Credit Hour

Course Meeting Time: Thursday 10:00-10:50 a.m.

Meeting Place: AH324

Instructor: Megan C. Dixon BS, RRT, AE-C

E-Mail: [dixonm9@ferris.edu](mailto:dixonm9@ferris.edu)

Cell Phone: 440-463-4151

Office Phone: 231-591-3186

Office Hours: Tuesday 11:00 a.m.-12:00 p.m.

Wednesday 1:00-3:00 p.m.

Thursday 11:00-12:00 p.m.

### Course Description

An overview of the signs, symptoms, diagnoses and management of chronic pulmonary disorders.

### Prerequisites

Admission to a CAHS program or by permit

### Course Outcomes

Following the completion of this course, each student will possess a knowledge of the major pathological changes associated with each disease entity, be able to classify and describe the signs and symptoms of specific diseases or conditions, describe the major radiologic findings in each disease, and identify the major diagnostic procedures and results of each, as well as principle medical treatment.

### Required Materials

Clinical Manifestations and Assessment of Respiratory Disease, Terry Des Jardins, George Burton, Mosby, 5th Edition/ 2006, ISBN13: 978-0-323-02806-6

### Academic Honesty

Cheating, plagiarism, and other forms of academic dishonesty including the acquisition, without permission, of tests and other academic material belonging to a member of the University community, and the sale and/or distribution of such material are in violation of University policy and subject to disciplinary action.

### Disabilities Services

Students with a documented disability (physical, learning, mental, emotional) requiring a classroom accommodation should contact the Disabilities Services Office located in Arts & Sciences Commons 1017K, ext. 3772, or ASC 1021, ext. 5039.

### Evaluation

Lecture exams are scheduled throughout the semester. The final examination is comprehensive.

Grades are as follows:

5 Case Studies (40 pts. Each)		200 points
6 Lecture Exams (100 pts. Each)		600 points
Comprehensive Final		200 points
<b>TOTAL:</b>		<b>1000 points</b>
93-100%	A	(930-1000 points)
90-92%	A-	(900-920 points)
87-89%	B+	(870-890 points)
83-86%	B	(830-860 points)
80-82%	B-	(800-820 Points)

77-79% C+ (770-790 Points)  
 73-76% C (730-760 Points)

\*A grade of (C) or better is necessary to continue in the course sequence.

**My Grades:**

Case Study I	_____	/40 points
Case Study II	_____	/40 points
Case Study III	_____	/40 points
Case Study IV	_____	/40 points
Case Study V	_____	/40 points
Exam I	_____	/100 points
Exam II	_____	/100 points
Exam III	_____	/100 points
Exam IV	_____	/100 points
Exam V	_____	/100 points
Exam VI	_____	/100 points
Final Exam	_____	/200 points
Total:	_____	/1000 points

**Tentative Lecture Schedule**

Week 1: Chronic Bronchitis	
Week 2: Chronic Bronchitis Case Study	30 points
Week 3: Exam I	100 points
Week 4: Emphysema	
Week 5: Exam II	100 points
Week 6: Asthma	
Week 7: Asthma Case Study	30 points
Week 8: Exam III	100 points
Week 9: No Class	
Week 10: Bronchiectasis	30 points
Week 11: Exam IV	100 points
Week 12: Sleep Apnea	30 points
Week 13: No Class	
Week 14: Exam V and Croup	100 points
Week 15: Cystic Fibrosis	30 points
Week 16: Exam VI	100 points
Final: May 4. 10:00-11:40 am	200 points

\* The instructor for this course reserves the right to change, at any time, the schedule of assignments, point values of assignments, required material to be completed and/or read, dates assignments are due, and other course student responsibilities with the issuance of a notice with the effected changes and date of implementation.

**Policies:**

**Cell Phone Policy:**

Cell phones are not to be present at any point during class. There is to be no texting or phone calls. If a phone is heard or seen it will result in the student being dismissed for the remainder of class. If there is an extenuating circumstance which requires you to have your cell phone available on a given day please let me know otherwise the aforementioned policy will be in effect.

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The door will be closed once class is in session. If a student is more than 5 minutes late there will be no admittance to class that day. Students walking in late are distracting and disruptive to the learning environment.

**Attention Policy:**

If it is deemed that a student is unable to pay attention (i.e. they are sleeping) that student will be dismissed for the remainder of class. If you, as a student feel ill or tired, please stay home. This policy has two purposes. 1-if you are ill or tired you are not going to benefit by being present and 2-it is disrespectful to the instructor and distracting to your classmates.

**Extended Absence Policy:**

The student who has completed 75% of the coursework with a passing grade of at least a C, but is unable to finish the course work due to an "Excused Absence", may receive the grade of "I" for the course. The instructor will make the final determination. The student is held responsible for completing the remaining course work and/or tests by the last week of the next semester or a grade of "F" will be given. If the student receives an "I" in a Progression course, the student cannot take the next sequential Respiratory course until a minimal passing grade of a "C" is attained.

**Academic Honesty:**

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"Cheating" includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignment; or (3) the acquisition, without permission, of tests or other academic material belonging to a member of the University faculty or staff.

"Plagiarism" includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

A student who has been found to be in violation of academic misconduct may receive a failing grade in the course and any of the disciplinary sanctions outlined in the Board of Trustees policy of student responsibilities, including suspension or dismissal from the University.

**Disabilities Services:**

Students with a documented disability (physical, learning, mental, emotional) requiring a classroom accommodation should contact the Disabilities Services Office located in Arts & Sciences Commons 1017K, ext. 3772, or ASC 1021, ext. 5039.

**Americans with Disabilities Act:**

Support services and accommodations are provided for students with documented mobility, learning, hearing, vision, or physical disabilities, which interfere with the learning process. These services include educational, counseling, adaptive equipment, extended and/or alternative testing, and student note takers. The Educational Counselor for Students with Disabilities can be contacted for assistance at ext. 3772 or 5039, and is located in ASC 1017.

**Religious Holidays:**

Ferris State University will make reasonable accommodations for students who are absent from

the University in observance of religious holidays. It is the responsibility of the student to notify the faculty in writing during the first week of the semester of their intention to be absent from class on their day(s) of religious observance. Upon formal notification, the faculty will excuse the student from the class, labs, and/or clinics for the holiday(s) and allow the student to make up missed exams; however, the student is responsible for completion of all missed work within a reasonable time as determined by the faculty.

Requests for absence to participate in religious activities other than recognized religious holidays are not recognized by the University as excused absences. The student may present such a request to the faculty during the first week of the semester, and the faculty may approve such an absence at his or her discretion. If the instructor approves the absence, the student is responsible for completion of all missed work within a reasonable time as determined by the faculty.

If a student disagrees with the faculty member's determination, the student may make a written appeal to the Dean of the student's college. The decision of the Dean is final.

### **Student Dignity:**

The University expects all students and employees to conduct themselves with dignity and respect for students, employees, and others. It is each individual's responsibility to behave in a civil manner and make responsible choices about the manner in which they conduct themselves. Harassment of any kind is not acceptable at Ferris State University. The University does not condone or allow harassment of others whether engaged in by students, employees, supervisors, administrators, or by vendors or others doing business with the University. Harassment is the creation of a hostile or intimidating environment in which verbal or physical conduct, because of its severity or persistence, is likely to significantly interfere with an individual's work or education, or adversely affect a person's living conditions.

To assist with the understanding of what harassment is, this policy contains specific definitions of two of the more prevalent types of harassment – racial harassment and sexual harassment.

### **Racial Harassment:**

Racial harassment includes any conduct, physical or verbal, that victimizes or stigmatizes an individual on the basis of race, ethnicity, ancestry, or national origin. Such behavior could involve any of the following:

1. The use of physical force or violence to restrict the freedom of action or movement of another person, or to endanger the health or safety of another person;
2. Physical or verbal conduct intentional or otherwise that has the purpose or effect of (or explicitly or implicitly threatens to) interference with an individual's personal safety, academic efforts, employment, or participation in University-sponsored activities.
3. The conduct has the effect of unreasonably interfering with an individual's work, or academic performance or creating an intimidating, hostile, or offensive working, learning, or living environment.

The attributes of racial harassment described above are also the attributes of most other types of harassment that can occur. Harassment may be based upon a person's status that is protected by law (i.e., religion, veteran status, handicap, etc.), or may be for some other reason not specifically covered by law. In any event, harassment of any type is not acceptable at Ferris State University.

### **Sexual Harassment:**

Using the definition contained in the Equal Employment Opportunity Commission guidelines, adapted to include educational environments, sexual harassment is defined as follows: Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitutes sexual harassment when:

- 1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or academic advancement;

- 2) submission to or rejection of such conduct by an individual is used as a factor in employment or academic decisions affecting such individuals;
- 3) such conduct has the purpose or effect of substantially interfering with an individual's work or academic performance, or creating an intimidating, hostile, or offensive working, living, or academic environment.

While sexual harassment most often takes place in situations of power differential between the persons involved, sexual harassment may also occur between persons of the same status, e.g., student-to-student. The person exhibiting sexually harassing conduct need not realize or intend the conduct to be offensive for the conduct to constitute sexual harassment.

### **Harassment Concerns:**

Any person who believes he or she has been subjected to harassment of any kind (sexual, racial, or otherwise) should approach the individual whom they believe is responsible. He or she should identify the specific behavior, explain that he or she considers the behavior to be offensive and/or harassing, and ask the individual to stop the behavior. If assistance is needed to approach the individual, contact either an Academic Dean, the Dean of Students, the Director of Minority Student Affairs, or the Director of Affirmative Action.

If approaching the individual is not possible (i.e., you are uncomfortable or uncertain as to how the situation should be handled or concerned the situation may become volatile) or does not resolve the matter, it should then be reported immediately to an Academic Dean, the Dean of Students, the Director of Minority Student Affairs, the Director of Student Judicial Services, or the Director of Affirmative Action. If, for some reason, you are uncomfortable discussing your situation with any of these individuals, please report your situation to any member of University administration. The circumstances surrounding the matter will be fully investigated, including the nature of the harassment and the context in which it occurred.

All reports of harassment and subsequent investigations will be kept as confidential as possible. Anyone found to have violated this Policy will be subject to discipline up to and including discharge and dismissal, that may include, but not be limited to, official reprimand, official apology, sensitivity training, and/or other disciplinary action including dismissal. Likewise, because intentionally false accusations of harassment can have serious effects on innocent people, anyone found to have intentionally falsely accused another person of violating this Policy will be subject to discipline up to and including discharge or dismissal.

### **Disruptive Behavior Policy Statement:**

The College of Allied Health Sciences strives to maintain a positive learning environment and educational opportunity for all students. Consequently, patterns of behavior which obstruct or disrupt the learning environment of the classroom or other educational facilities will be addressed.

1. The instructor is in charge of the course. This includes assignments, due dates, methods and standards of grading, and policies regarding attendance, tardiness, late assignments, outside conferences, etc.
2. The instructor is in charge of the classroom. This includes the times and extent to which they allow questions or discussion, the level of respect with which they and other students are to be treated, and the specific behaviors they will allow within their classes. Open discussion of an honest opinion about the subject of a course is encouraged, but the manner in which the class is conducted is a decision of the instructor.
3. An instructor is entitled to maintain order in his/her class and has an obligation to other students to do so. Toward that end, an instructor is authorized and expected to inform a student that his/her behavior is disrupting a class and to instruct the student to stop that behavior. If the student persists, the instructor is authorized to direct the student to leave the class. If the student fails to comply with a directive to leave the class, the instructor may call Public Safety to assist with the student's removal.
4. If a student persists in a pattern of recurrent disruptive behavior, then the student may be subject to

administrative action up to and including an involuntary withdrawal from the course, following administrative review by the Allied Health Sciences Dean's Office, and/or University disciplinary proceedings.

5. Disruptive behavior cannot be sanctioned by a lowered course grade (e.g., from a B to a C) except insofar as quality of classroom participation has been incorporated into the instructor's grading policy for all students. (Note: Academic misconduct, which is covered by other regulations, can be a legitimate basis for lowering a grade or failing the student.)

6. Students as well as employees are bound by the University's policy against harassment in any form. Harassment will not be tolerated.

7. The office of the student's dean will be notified of any serious pattern or instance of disruptive behavior.

### **Honesty Policy:**

The purposes of this policy are to encourage a mature attitude toward learning to establish a sound academic morale, and to discourage illegitimate aid in examinations, laboratory, and homework.

Cheating is defined as using or attempting to use, giving or attempting to give, obtaining or attempting to attain, products or prepared materials, information relative to a quiz or examination or other work that a student is expected to do alone and not in collaboration with others. Plagiarism (copying) of themes or other written work shall also be considered an infraction.

Students are required to present the results of their own work except under circumstances in which the instructor may have requested or approved the joint effort of a number of students.

The penalty for the first offense of willful cheating consists of the student receiving a zero for the assignment in which the infraction occurs. However, cheating on quizzes or examinations means failure in the course. The student may appeal the decision to the Disciplinary Committee.

## **RESP 166 Respiratory Care Delivery Procedures 2 Laboratory**

Ferris State University

College of Allied Health Sciences

Department of Clinical Lab, Respiratory Care and Health Administration

Summer 2009

2 Credit Hours

Course Meeting Time: Tuesday and Thursday

8:00-11:20 a.m. or 2:00-5:20 p.m.

Meeting Place: AH324

Instructor: Megan C. Dixon BS, RRT, AE-C

E-Mail: [dixonm9@ferris.edu](mailto:dixonm9@ferris.edu)

Cell Phone: 440-463-4151

Office Phone: 231-591-3186

Office Hours: Wednesday 10:00 a.m.-2:00 p.m.

### **Course Description**

Continuation of RESP 135 with increased concentration on basic respiratory care equipment and therapeutic modalities used to manage and care for individual with cardiopulmonary disease in multiple settings. Prerequisite:RESP 135 Corequisite:RESP 166

### **Prerequisites**

Admission to a CAHS program or by permit

### **Course Outcomes**

At the end of this course the student will be able to demonstrate competency in:

1. Performing the following techniques for Airway Clearance
  - a. Postural Drainage
  - b. Chest Percussion

- c. High Frequency Chest Wall Oscillation (The Vest)
- d. Adjunctive Breathing Techniques
- 2. Perform nasotracheal, endotracheal and tracheal suctioning.
- 3. Insertion of the LMA- Laryngeal Mask Airway, Oral Airway, Nasalpharyngeal Airway
- 4. Perform endotracheal intubation and extubation
- 5. Perform trach tube insertion and decannulation
- 6. Monitor and maintain cuff pressures on endotracheal tubes trach tube
- 7. Perform trach care
- 8. Perform Basic Cardiopulmonary Resuscitation
- 9. Perform manual ventilation with a resuscitation bag using a mask or tube adapter
- 10. Demonstrate selection and wearing of proper isolation and personal protective equipment.

**Required Materials**

Thomas J. Butler: Laboratory Exercises for Competency in Respiratory Care, 2<sup>nd</sup> Edition

**Evaluation**

Grades are as follows:

9 Procedure Check offs (50 pts. Each)	450 points
8 Critical Thinking Packets (50 pts. Each)	400 points
Comprehensive Final Checkoff Exam	250 points
<b>TOTAL:</b>	<b>1100 points</b>

93-100%	A
90-92%	A-
87-89%	B+
83-86%	B
80-82%	B-
77-79%	C+
73-76%	C

\*A grade of (C) or better is necessary to continue in the course sequence.

**My Grades:**

1. Competency: Ch 16: IPPB	_____ /50 points
2. Competency: Ch 19 Resuscitation	_____ /50 points
3. Competency: Ch 20: Airways	_____ /50 points
4. Competency: Ch 22: Intubation	_____ /50 points
5. Competency: Ch 21: Suctioning	_____ /50 points
6. Competency: Ch 23: Trach Care	_____ /50 points
7. Competency: Ch 24: Airway Care	_____ /50 points
8. Competency: Ch 26: ABG Sampling	_____ /50 points
9. Competency: Ch 28: ABG Interpretation	_____ /50 points
10. Critical Thinking Packet 1	_____ /50 points
11. Critical Thinking Packet 2	_____ /50 points
12. Critical Thinking Packet 3	_____ /50 points
13. Critical Thinking Packet 4	_____ /50 points
14. Critical Thinking Packet 5	_____ /50 points
15. Critical Thinking Packet 6	_____ /50 points
16. Critical Thinking Packet 7	_____ /50 points
17. Critical Thinking Packet 8	_____ /50 points
18. Final Skills Exam	_____ /250points
<b>Total:</b>	_____ /1000points



Week	Points	Procedure	Competency Page #
1	50	IPPB	265-266
2	50	Resuscitation	317-318
3	50	Airways	327-328
3	50	Intubation	365-366
4	50	Suctioning	343-346
4	50	Tracheostomy Care	377-380
5	50	Airway Care	393-398
6	50	ABG Sampling	437-442
7	50	ABG Interpretation	475-476
7		Review for Final Competency Exam	
8		Final Competency Exams	

\* The instructor for this course reserves the right to change, at any time, the schedule of assignments, point values of assignments, required material to be completed and/or read, dates assignments are due, and other course student responsibilities with the issuance of a notice with the effected changes and date of implementation.

### **Procedural Checkoff Methodology**

The purpose of procedural evaluations (checkoffs) is to develop therapeutic skills, which will be used during clinical internships and after graduation. These skills are acquired through careful repetition of each procedure. It is important that the procedures become part of the student's long-term memory in order to insure safe patient care. The following steps are as important as completing each procedural evaluation.

1. The student will practice each procedure until they can complete each step correctly and in the suggested time frame as listed in the Clinical Laboratory Competencies book.
2. The student will then perform the procedure in front of one of their classmates to be assessed for the peer evaluation portion of the procedural evaluation (checkoff). During the peer evaluation, the classmate is required to pay close attention to each step of the procedural evaluation (checkoff) and assure every step has been properly completed and documented.
3. When the student is ready and has completed the above two steps, they are to arrange a time for a faculty procedural evaluation (checkoff).
  - while waiting for their evaluation time, the student is expected to continue to prepare and to make sure they have all necessary supplies for the checkoff.
  - the student must have their Lab book in order to be assessed for a Faculty checkoff.
  - the faculty checkoff may be aborted/stopped if the student is not ready or available when the faculty is ready.
4. The student must repeat a Peer Evaluation after failing a Faculty Procedural Evaluations. In most situations, the student must practice the failed check off several times before repeating the Peer Evaluation.
5. The faculty procedural evaluation (checkoff) is not to be used as practice time. The checkoff may be aborted/stopped if the student does not demonstrate competency in performance. The faculty may refuse to allow any further checkoff attempts for the remainder of the lab period if the student is not showing serious desire to practice the procedure.

**Final Comprehensive Checkoff** The comprehensive checkoff will involve the student demonstrating 3 or more procedures that were previously checked off during the spring and summer semester. The instructor will determine how the procedures will be selected. The student will be graded on how skill level, reasonable time to complete the procedures, and completion of the necessary step particularly critical steps. The final checkoff may include the ability to utilize protocols. The final checkoff may include arterial blood gas interpretation. The final checkoff will include critical thinking questioning.

**Policies:**

**Cell Phone Policy:**

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**Tardiness Policy:**

The door will be closed once class is in session. If a student is more than 5 minutes late there will be no admittance to class that day. Students walking in late are distracting and disruptive to the learning environment.

**Attention Policy:**

If it is deemed that a student is unable to pay attention (i.e. they are sleeping) that student will be dismissed for the remainder of class. If you, as a student feel ill or tired, please stay home. This policy has two purposes. 1-if you are ill or tired you are not going to benefit by being present and 2-it is disrespectful to the instructor and distracting to your classmates.

**Attendance:** Each student will be expected to attend every scheduled laboratory session. While it is understood that extenuating circumstances may result in periodic absences, absences resulting in six hours of missed laboratory sessions will be deemed excessive. A decrease of 2% of the final grade will be made for every hour missed that is deemed excessive. Tardiness of two class or laboratory sessions will be handled in the same manner. If you miss a laboratory session, you are responsible for obtaining the material covered.

**Extended Absence Policy:**

The student who has completed 75% of the coursework with a passing grade of at least a C, but is unable to finish the course work due to an "Excused Absence", may receive the grade of "I" for the course. The instructor will make the final determination. The student is held responsible for completing the remaining course work and/or tests by the last week of the next semester or a grade of "F" will be given. If the student receives an "I" in a Progression course, the student cannot take the next sequential respiratory course until a minimal passing grade of a "C" is attained.

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### **Racial Harassment:**

Racial harassment includes any conduct, physical or verbal, that victimizes or stigmatizes an individual on the basis of race, ethnicity, ancestry, or national origin. Such behavior could involve any of the following:

1. The use of physical force or violence to restrict the freedom of action or movement of another person, or to endanger the health or safety of another person;
2. Physical or verbal conduct intentional or otherwise that has the purpose or effect of (or explicitly or implicitly threatens to) interference with an individual’s personal safety, academic efforts,

employment, or participation in University-sponsored activities.

3. The conduct has the effect of unreasonably interfering with an individual's work, or academic performance or creating an intimidating, hostile, or offensive working, learning, or living environment.

The attributes of racial harassment described above are also the attributes of most other types of harassment that can occur. Harassment may be based upon a person's status that is protected by law (i.e., religion, veteran status, handicap, etc.), or may be for some other reason not specifically covered by law. In any event, harassment of any type is not acceptable at Ferris State University.

### **Sexual Harassment:**

Using the definition contained in the Equal Employment Opportunity Commission guidelines, adapted to include educational environments, sexual harassment is defined as follows:

Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitutes sexual harassment when:

- 1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or academic advancement;
- 2) submission to or rejection of such conduct by an individual is used as a factor in employment or academic decisions affecting such individuals;
- 3) such conduct has the purpose or effect of substantially interfering with an individual's work or academic performance, or creating an intimidating, hostile, or offensive working, living, or academic environment.

While sexual harassment most often takes place in situations of power differential between the persons involved, sexual harassment may also occur between persons of the same status, e.g., student-to-student. The person exhibiting sexually harassing conduct need not realize or intend the conduct to be offensive for the conduct to constitute sexual harassment.

### **Harassment Concerns:**

Any person who believes he or she has been subjected to harassment of any kind (sexual, racial, or otherwise) should approach the individual whom they believe is responsible. He or she should identify the specific behavior, explain that he or she considers the behavior to be offensive and/or harassing, and ask the individual to stop the behavior. If assistance is needed to approach the individual, contact either an Academic Dean, the Dean of Students, the Director of Minority Student Affairs, or the Director of Affirmative Action.

If approaching the individual is not possible (i.e., you are uncomfortable or uncertain as to how the situation should be handled or concerned the situation may become volatile) or does not resolve the matter, it should then be reported immediately to an Academic Dean, the Dean of Students, the Director of Minority Student Affairs, the Director of Student Judicial Services, or the Director of Affirmative Action. If, for some reason, you are uncomfortable discussing your situation with any of these individuals, please report your situation to any member of University administration. The circumstances surrounding the matter will be fully investigated, including the nature of the harassment and the context in which it occurred.

All reports of harassment and subsequent investigations will be kept as confidential as possible. Anyone found to have violated this Policy will be subject to discipline up to and including discharge and dismissal, that may include, but not be limited to, official reprimand, official apology, sensitivity training, and/or other disciplinary action including dismissal. Likewise, because intentionally false accusations of harassment can have serious effects on innocent people, anyone found to have intentionally falsely accused another person of violating this Policy will be subject to discipline up to and including discharge or dismissal.

### **Disruptive Behavior Policy Statement:**

The College of Allied Health Sciences strives to maintain a positive learning environment and educational opportunity for all students. Consequently, patterns of behavior which obstruct or disrupt

the learning environment of the classroom or other educational facilities will be addressed.

1. The instructor is in charge of the course. This includes assignments, due dates, methods and standards of grading, and policies regarding attendance, tardiness, late assignments, outside conferences, etc.
2. The instructor is in charge of the classroom. This includes the times and extent to which they allow questions or discussion, the level of respect with which they and other students are to be treated, and the specific behaviors they will allow within their classes. Open discussion of an honest opinion about the subject of a course is encouraged, but the manner in which the class is conducted is a decision of the instructor.
3. An instructor is entitled to maintain order in his/her class and has an obligation to other students to do so. Toward that end, an instructor is authorized and expected to inform a student that his/her behavior is disrupting a class and to instruct the student to stop that behavior. If the student persists, the instructor is authorized to direct the student to leave the class. If the student fails to comply with a directive to leave the class, the instructor may call Public Safety to assist with the student's removal.
4. If a student persists in a pattern of recurrent disruptive behavior, then the student may be subject to administrative action up to and including an involuntary withdrawal from the course, following administrative review by the Allied Health Sciences Dean's Office, and/or University disciplinary proceedings.
5. Disruptive behavior cannot be sanctioned by a lowered course grade (e.g., from a B to a C) except insofar as quality of classroom participation has been incorporated into the instructor's grading policy for all students. (Note: Academic misconduct, which is covered by other regulations, can be a legitimate basis for lowering a grade or failing the student.)
6. Students as well as employees are bound by the University's policy against harassment in any form. Harassment will not be tolerated.
7. The office of the student's dean will be notified of any serious pattern or instance of disruptive behavior.

### **Honesty Policy:**

The purposes of this policy are to encourage a mature attitude toward learning to establish a sound academic morale, and to discourage illegitimate aid in examinations, laboratory, and homework.

Cheating is defined as using or attempting to use, giving or attempting to give, obtaining or attempting to attain, products or prepared materials, information relative to a quiz or examination or other work that a student is expected to do alone and not in collaboration with others. Plagiarism (copying) of themes or other written work shall also be considered an infraction.

Students are required to present the results of their own work except under circumstances in which the instructor may have requested or approved the joint effort of a number of students.

The penalty for the first offense of willful cheating consists of the student receiving a zero for the assignment in which the infraction occurs. However, cheating on quizzes or examinations means failure in the course. The student may appeal the decision to the Disciplinary Committee.

# RESP 292 Adult Critical Care Practicum

## College of Allied Health Sciences

### Syllabus

#### Course Description:

Adult Critical Care Clinical is the clinical internship in which the student applies basic clinical respiratory care procedures and mechanical ventilator theory to adult patients in the critical care units. Under the supervision of a Respiratory Therapist (the Preceptor), the student will demonstrate competency for all procedures covered in the previous courses. Prerequisite: RESP 215, RESP 220 and RESP 221.

#### Class Schedule:

The RESP 292 - Adult Critical Care Clinical course typically consists of 27 twelve-hour shifts (324 clinical hours) which are conducted in a hospital intensive care unit (ICU) or Long Term Acute Care (LTAC) setting under the direction of a clinical Preceptor from the host-hospital's Respiratory Care Department. Student clinical site assignments are located on the Ferris Connect RESP 292 Homepage. Clinical shifts are assigned by the Clinical Coordinator and may not be changed without the consent of the hospital's authorized liaison and the FSU Clinical Coordinator.

#### Instructor:

Instructor information is provided on the Ferris Connect home page

#### Grading:

The final grade for RESP 292 Adult Critical Care Practicum will be based on the student performance according to the following point values:

<u>Assignments</u>	<u>Points</u>
Adult Case Study	100
Adult Case Study Presentation	100
Attendance	50
Clinical Procedure Evaluations/Check-offs	300
Faculty Assessment of Student	135
Preceptor Evaluation of Student	50
Preceptor Evaluation of Student: Final	50
Protocol Review	50
Physician Contact Time (60 minutes)	30
Student Evaluation of Clinical Preceptor	20
Student Evaluation of Clinical Rotation	20
Experience Logs	

270

**TOTAL 1175**

**It is the student's responsibility to assure that all assignments are completed and submitted correctly and on-time. No late work will be accepted. The student should keep copies of all paperwork. All original paperwork must be handed in during scheduled days on campus during exam week.**

**Grade distribution:**

A	95 – 100%	C	73 – 76%
A-	90 – 94%	C-	70 – 72%
B+	87 – 89%	D+	67 – 69%
B	83 – 86%	D	63 – 66%
B-	80 – 82%	D-	60 – 62%
C+	77 – 79%	F	< 60%

**Attendance:**

- a. The student must maintain accurate records of attendance which include the starting and ending times of each clinical shift. Attendance Records must be initialed by the hospital preceptor at the beginning and end of each shift. This written record must be turned-in at the end of the clinical rotation.
- b. An absence should only occur for illnesses or significant personal situations. Dismissal from the clinical site and/or a failure grade for the course may result:
  - i. From excessive and/or inappropriate absences
  - ii. If the student does not notify the Respiratory department and the Clinical Coordinator
- c. Students must notify both the hospital and the clinical instructor of absences. Make up days will be required for all absences unless excused by the Clinical Coordinator.
- d. Students must appropriately notify:
  - i. The hospital at least 30 minutes before the start of the shift
  - ii. The Clinical Coordinator within 3 hours of the start of the shift
- e. Students are not expected, nor are they allowed to attend clinical rotations during scheduled breaks as listed on the University's Academic Calendar.

**Case Study**

- a. Case study information, examples and grading scales are located on the Ferris Connect RESP 292 homepage.
- b. An adult case study must be prepared and presented to the class at the end of the semester
- c. The student must also turn in a written report at the end of the semester.
- d. The case study will be graded in two parts: the presentation and the written report

**Clinical Procedure Evaluation/Check-offs:**

- a. In order to receive a passing grade in RESP 292, all required clinical check-offs must be completed.
- b. The student should always observe a procedure and practice before performing it on a patient.
- c. The student must never perform a procedure without instruction and assessment of skills by a preceptor.
- d. If the procedure is not available at the clinical site, a Check-off Exclusion form must be completed.
- e. Some check-offs require the procedure to be performed on two different pieces of equipment (i.e., ventilators – two different models must be used).
- f. In order to finish all of the check-offs in a timely manner, the student should try to complete at least one each week.
- g. Early in the clinical rotation, the student should complete the basic respiratory care check-offs (O<sub>2</sub> therapy, SVN, MDI, etc.).
- h. Completed clinical procedure check-offs must be taken out of the lab book and turned in at the end of the semester.
- i. All checkoffs must include the student's name, peer, lab and clinical signatures.

- j. Loss of the clinical check-offs or incomplete/unsigned paperwork will result in the student repeating the check-off.
- k. The Clinical Procedure Evaluation/Check-off grade is all or nothing. The student will not receive a grade until all check-offs are satisfactorily completed.
- l. The student must not create an unfair demand on the clinical site in order to complete check-offs.

**Clinical Requirements:**

A brief summary of requirements for students in clinical rotation is listed below. A comprehensive outline of all clinical requirements is located in the Adult Critical Care Clinical Policy. This policy is located on the Ferris Connect Homepage.

- 1. Dress code
- 2. Approved FSU photo badge
- 3. Maroon scrub top and pants
- 4. Footwear
  - a. Plain white leather (or leather-like) shoes with rubber soles
  - b. No open-toes
  - c. Croc-style shoes with no holes are allowed
  - d. Gray or white socks
  - e. A plain gray or white T-shirt may be worn underneath the scrub top
  - f. Pressed white lab coat (optional)
  - g. Undergarments are required and must not be visible
- 5. Students must provide their own stethoscope
- 6. Piercing(s)
  - a. A maximum of two piercings per ear are allowed
  - b. Must be conservative and unobtrusive in design
  - c. No other visible piercings are allowed
- 7. Tattoos must not be visible under any circumstance
- 8. Students must not report to a clinical site with the following:
  - a. Tobacco odor
  - b. Noticeable cologne or perfume
  - c. Artificial fingernails
- 9. Basic Clinical Lab Competencies for Respiratory Care: An Integrated Approach, 4<sup>th</sup> edition textbook must be brought to each clinical shift
- 10. No cell phones, pagers, MP3 players, cigarettes/cigars, weapons, or other inappropriate items are allowed in the clinical setting
- 11. Students must:
  - a. Obtain contact information from the clinical site in case of illness or for emergency notification.
  - b. Identify their assigned clinical preceptor and the expectations required of them each day.
  - c. Stay with their assigned preceptor unless otherwise instructed by authorized hospital personnel
  - d. Not leave the assigned area without the approval of their preceptor.
  - e. Always know how to locate their preceptor.
  - f. Not accept an assignment which would place them in an area without a preceptor available.
  - g. Demonstrate an interest in and a willingness to learn new experiences
  - h. Not leave the clinical site early without prior authorization from the Course Instructor and the appropriate hospital staff member. Emergency situations, although infrequent, must be



### **Contacting the Instructor:**

Students are required to contact the instructor as soon as possible for absences, tardiness, and in-hospital critical incidents. In most cases, the student may leave a message on the instructor's office phone voice mail. This would include requests for information, paperwork, make-up dates, etc. Use of the instructor's home or cell phone is limited to emergencies only. Inappropriate use of the instructor's private home or cell phone could result in disciplinary action.

### **Experience Logs:**

Experience Logs must:

- a. Be submitted via e-mail through the Ferris Connect RESP 292 course shell on a weekly basis.
  - b. Be submitted no later than two days following the last clinical shift for that particular week.
  - c. Include a separate form completed for each week.
  - d. Be labeled correctly in the subject line ie. **Experience Log Week 1, etc.**
  - e. Include notations of absences.
2. The student must download or copy the Clinical Experience Log found on the Ferris Connect RESP 292 Homepage. Each Weekly Experience Log is worth 30 points. A deduction of points for the week will occur for a failure to include any or all of the following:
    - a. Submit weekly experience record in the correct format
    - b. Address all items on the form
    - c. Submit the assignment on-time
    - d. Attendance and procedure check-offs must coincide with e-mail progress notes. Inaccuracies can result in partial or total loss of points for the weekly progress notes. Clinical Experience Records must show Physician Contacts.
  3. **This is the only paperwork that must be turned in (emailed) during the semester.**
  4. **All paperwork must be compiled by the student and turned in at the end of the semester. This includes a printed copy of the weekly logs, home care and pulmonary rehab worksheets.**

### **End of Semester Activities:**

- a. All students are required to attend the last two days of the clinical rotation on campus. These activities will not interfere with the Commencement Ceremony.
- b. The schedule will be as follows:
  - a. Day One
    - i. Each student will be required to present a case study to the class.
    - ii. The case study must be done orally and in written form.
    - iii. All required clinical paperwork must be turned in to the faculty so a final grade can be determined.
    - iv. Final paperwork must be compiled in a binder or folder.
  - b. Day two
    - i. 262 RRT examination
    - ii. SAI evaluation of course
    - iii. Graduate student survey
    - iv. NBRC/MDCH notification/paperwork
    - v. Review licensure process
    - vi. Pinning ceremony
    - vii. Dinner and beyond...optional

<b>Finals Week Schedule</b>	
Day 1	
9:00-12:00	Case Study Presentations
12:00-1:00	Lunch
1:00-4:00	Case Study Presentations
Day 2	
1:00-4:00	262 RRT Examination
4:00-5:30	SAI evaluation of course
	Graduate survey
	NBRC/MDCH notification/paperwork
5:30-6:00	Pinning Ceremony
6:00-9:00	Dinner

### **Faculty Assessments:**

The student performance will be evaluated by the FSU Clinical Supervisor at least once while in a clinical rotation

- a. Clinical skills, performance, and knowledge will be assessed with the Faculty Assessment form.
- b. Clinical visits may be unannounced.
- c. Absent students not having followed the attendance policy will earn 0 points.
- d. Missed faculty assessments cannot be made up.

### **Handbook and Clinical Policies:**

- a. The student must read and adhere to the Handbook and Clinical Policies located on the RESP 292 Ferris Connect Homepage
- b. The student must print, read, sign, and date the *Policy and Procedure Review* from the Student Handbook.
- c. The student is expected to read and follow the rules and policies that are listed in the Clinical Policy Manual. The Clinical Policy Manual can be found on the Ferris Connect RESP 292 homepage.

### **Incomplete Grade:**

A grade of "I" will only be considered for extenuating circumstances that have led to a student missing a portion of the course.

1. Extenuating circumstances are generally defined as those situations over which the student has little or no control i.e. illness, birth, jury duty, death of parent, injury, or military service. Suitable documentation is required.
2. Students must be making reasonable progress in their coursework as evidenced by completion of at least 75% of coursework at passing levels before an "I" will be assigned.
3. Students are required to sign an agreement stipulating assignments and deadlines that must be met in order to complete the course.
4. An "I" grade will automatically become an "F" prior to final exam week of the following semester (not counting summer) unless the faculty member files another grade or extends the incomplete grade.

### **Physician Contact:**

- a. The student will be expected to have a total of 60 minutes of physician contact during the clinical rotation.
- b. Physician contact can be in the form of one-on-one conversations, physician lectures, patient rounds, case presentations, etc
- c. A summary of the contact must be described on the Weekly Experience Log.

### **Preceptor Evaluations:**

The student is expected to have a mid-term evaluation completed at the beginning of the 4th week of the clinical rotation. This is to be reviewed by the student and given to the FSU clinical instructor during the first clinical visit on or before the end of week 5. The student is expected to discuss each evaluation with the clinical staff and correct their weaknesses. They should also discuss any significant problems with the FSU clinical instructor. The final preceptor evaluation must be completed during week 8 and turned in at the end of the clinical rotation.

**These evaluations must be reviewed by the clinical instructor. The originals must be included with the paperwork that is to be turned in by the student at the end of the semester.**

### **Professional Behavior:**

- a. The student is a guest in the clinical site.
- b. It is expected that the student exhibit professional behavior at all times.
- c. Attendance problems and tardiness will not be tolerated by the University. The student is expected to arrive on time and to stay the entire scheduled time.
- d. The manager and/or adjunct clinical instructor are FSU's representatives during the clinical rotation. They will observe and comment on the student's behavior and skill level while in the hospital.
- e. The student must abide by hospital policies as well as FSU Respiratory program polices. Violation of these policies may result in dismissal of the student from the clinical site and/or a failing grade for the course.
- f. The student is expected to be attentive and involved in aspects of respiratory care. The student should constantly demonstrate a desire to see or learn new or additional aspects of respiratory care.
- g. Sleep, appearance of sleeping, or any inappropriate behavior may result in dismissal from the program.
- h. HIPPA guidelines should be followed at all times. Any breach of confidential information will not be tolerated and may result in dismissal from the program.

### **Protocol Review Paper:**

- a. This is a three page, double-spaced, typed paper on a protocol utilized by the Respiratory Care Department, preferably in the critical care area.
- b. The following elements must be addressed:
  - a. Summary of the protocol and its purpose
  - b. How the protocol applies to respiratory care and improvement of patient care
  - c. Staff and management opinions on the protocol
- c. A copy of the protocol must be included with the paper. This does not count as part of the three pages.
- d. Students having difficulty locating a protocol may use one from the Protocol folder on the Ferris Connect homepage.

### **Student Evaluations:**

1. The student must complete:
  - a. Student Evaluation of Clinical Rotation
  - b. Student Evaluation of Clinical Preceptor
  - c. These evaluations are located on the Ferris Connect RESP 292 homepage and must be turned in at the completion of the clinical rotation
  - d. The student may be asked to complete a confidential evaluation of the FSU Clinical Instructor.

### **Syllabus Changes:**

Teaching is not an exact science and changes may be needed to best meet the learning needs of the class. The instructor reserves the right to make needed and appropriate adjustments to this syllabus.

### **Clinical Objectives:**

At the end of this course the student is expected to be able to demonstrate the following through a competency evaluation and certain written reports:

1. Gather all necessary equipment for any therapeutic procedure/intervention taught this or previous semesters
2. Assemble all equipment/supplies properly and aseptically
3. Apply equipment/perform therapy to manikin, peer, or patient ensuring patient/therapist safety
4. Assess the application of the equipment or therapy utilizing patient assessment techniques (vital signs, breath sounds, peak flow rates, pulse oximetry checks, etc.)
5. Locate, draw up the proper dosage, and properly administer one of the common respiratory care medications for use in a Small Volume Nebulizer (SVN) or by use of a metered dose inhaler (MDI) to a mechanically ventilated patient
6. Obtain and instruct a peer or Preceptor in the proper application of a therapeutic procedure, piece of equipment, or a particular machine (ventilator)
7. Troubleshoot any equipment or patient problems during the application or use of therapies or equipment
8. Properly document any therapeutic procedure administered or equipment applied to a patient via paper or computerized medical record using approved medical abbreviations
9. Demonstrate the ability to adequately review a chart, evaluate patients, appropriately initiate, monitor, and adjust a mechanical ventilator, and recommend alternate treatment and/or therapeutic modalities
10. Be able to clearly explain two Adult Patient Assessments in writing regarding all aspects listed in the Adult Patient Assessment Guidelines
11. Be able to demonstrate the ability to write all required course assignments as pertaining to proper grammar, spelling, and organization of information
12. Be able to clearly explain in writing the Daily Experience Log
13. Be able to demonstrate concepts learned by properly completing the Daily Experience Log for each day of their clinical rotation
14. Be able to discuss and give examples that demonstrate a full understanding of patient care and the management of a mechanical ventilator to a FSU Respiratory Faculty member
15. Be able to demonstrate the ability to adhere to professional behavior standards by following the class policies set out in this syllabus and any applicable policies of the host hospital.

### **General Policies:**

Please refer to the University Handbook @  
<http://www.ferris.edu/htmls/administration/StudentAffairs/Studenthandbook/>  
and the College of Allied Health Sciences Handbook @  
[http://www.ferris.edu/htmls/colleges/alliedhe/link\\_desc.cfm?LinkID=34](http://www.ferris.edu/htmls/colleges/alliedhe/link_desc.cfm?LinkID=34)

## APPENDIX C Faculty Vitas

### Megan Dixon

43450 Russia Road.  
Elyria, Ohio. 44035.  
Home: (440) 463-4151  
[mdixon@ndc.edu](mailto:mdixon@ndc.edu)

#### Education

Ferris State University	GPA: 4.00
Master of Career and Technical Education	
Anticipated Completion: December 2010	
Notre Dame College	GPA: 3.85
Education Licensure	Area of Concentration: 7-12 <sup>th</sup> grade Life Science
Completion: May 12, 2007	
Bowling Green State University	GPA: 3.41
Associate of Applied Science	Major: Respiratory Care Technology
Graduation: December 16, 2006	
Notre Dame College	GPA: 3.26
Bachelor of Science	Major: Biology
	Graduation: May 7, 2005

#### Credentials

Certified Respiratory Therapist (CRT)	April 2007
Registered Respiratory Therapist (RRT)	August 2007

#### Honors and Awards

Deans List	2001, 2004-2005
Sophomore Honor Society	2001-2002
St. Catherine Medal	2002-2003

#### Scholarships and Grants

Activity/Athletic Grant	2001-2003
Cleveland Scholarship	2000-2005
Donna Hays Memorial Scholarship	2000-2001
Notre Dame College Merit Scholarship	2000-2004
Ohio Board of Regents Endowment Scholarship	2000-2001
Ohio Foundation of Independent Colleges	2002-2004

#### Professional Experience

Ferris State University	May 2009-Present
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##### Program Coordinator

- Responsible for all aspects of the respiratory care program including the organization, administration, continuous review, development, and general effectiveness of the program.

Ferris State University

August 2008-Present

**Faculty Member**

- Full time instructor of respiratory care.
- Responsible for revision of the pathophysiology, cardiopulmonary anatomy and physiology, and pharmacology courses.

Fairview Hospital

July 2005-July 2008

**Respiratory Therapist**

- Deliver aerosolized Medications
- Deliver metered dose and dry powder inhalers
- Draw and analyze arterial blood gases
- Clean, set-up and test out life support equipment
- Educate patients in smoking cessation and COPD home care
- Initiate, monitor and discontinue mechanical ventilation
- Intubate and extubate patients
- Provide resuscitation
- Perform pulmonary function measurements

EMH Regional Medical Center

August 2006-December 2006

**Respiratory Care Technologist**

- Same as above job description

Fairview Hospital

**AVI Hostess**

October 2004- April 2006

- Pass and Collect Patient Food Trays
- Enter and Fill Pantry Stock
- Check and Enter Patient Menus

**Additional Work Experience**

Regal Cinemas

**Cinema Staff**

June 2000- August 2002

**Manager**

August 2002-October 2004

- Proficient in all employee areas of the theatre including: box office, café, concession and ushering
- Successfully handles customer complaints
- Hires and trains new employees and managers
- Projection Booth Certified
- Recognizes the procedure for deposits and pulling cash drawers

Notre Dame College Career Center

**Office Aide**

August 2001 – May 2002

- Data entry using Microsoft Access database
- Created promotional flyers using Microsoft Publisher
- Other office duties as required

Tot Spot

**Child Care**

August 2001 - May 2002

- Care for 3 –20 children ages infant to pre-kindergarten
- Create games and activities for children
- Supervise children during meals and play times

**Activities**

Respiratory Care Class President	2005-2006
Biology Club President	2003-2005
Student Senate Secretary, President	2002-2003
Orientation Team Leader	2002-2003
Campus Ministry	2000-2005
Bowling Club Secretary, President	2001-2002
Judicial Review Committee	2002-2003
Dance Team Member	2000-2001
Fairview Hospital Volunteer	1996-2001

**Professional Affiliations**

AARC (American Association of Respiratory Care) Member	2005-2009
MSRC (Michigan Society for Respiratory Care) Member	2009-2010

**Teaching Interests: Subjects I Would Be Interested in Teaching**

Principles of Respiratory Care I, II  
Cardiopulmonary and Renal Anatomy and Physiology  
Respiratory Pathophysiology  
General Biology  
Cell Biology  
Anatomy and Physiology  
Medical Terminology

# CURRICULUM VITAE

## LAWRENCE D. MCMULLIN MM, RRT, RPFT

3847 E. Norwalk Dr. SE, Grand Rapids, MI 49508 | 616-247-1085 | mcmull1@ferris.edu

### EDUCATION

- Aquinas College, Grand Rapids, MI  
**Masters in Management (MM)** 1992
- Northwestern University Medical Center, Chicago, IL  
**Respiratory Therapy Certificate** 1984
- Benedictine University, Lisle, IL  
**B.S. in Biology** 1979

### TEACHING EXPERIENCE

#### Ferris State University

2007 - Present

- Assistant Professor
- Collaborative curriculum revision
- Committees: CAHS Safety
- Summer 2008
  - RESP 220 AIA – Adult Ventilation
  - RESP 221 AGA - Adult Ventilation Laboratory
  - RESP 221 AGB - Adult Ventilation Laboratory
  - RESP 235 AIA – Advanced Cardiopulmonary Diagnostics
  - RESP 236 AGA - Advanced Cardiopulmonary Diagnostics Laboratory
  - RESP 236 AGB - Advanced Cardiopulmonary Diagnostics Laboratory
  - RESP 291 ELA – Neonatal – Pediatric Clinical
  - RESP 291 NEA – Neonatal – Pediatric Clinical
  - RESP 292 ELA – Adult Critical Care Clinical
  - RESP 292 NEA – Adult Critical Care Clinical
- Spring 2008
  - RESP 100 AIA – Introduction to Respiratory Care
  - RESP 135 VL3 – Basic Respiratory Care Delivery
  - RESP 136 301 - Basic Respiratory Care Delivery Laboratory
  - RESP 136 302 - Basic Respiratory Care Delivery Laboratory
  - RESP 292 401 – Adult Critical Care Clinical
- Fall 2007
  - RESP 100 AIA – Introduction to Respiratory Care
  - RESP 235 AIA – Advanced Cardiopulmonary Diagnostics
  - RESP 236 301 - Advanced Cardiopulmonary Diagnostics Laboratory
  - RESP 236 302 - Advanced Cardiopulmonary Diagnostics Laboratory
  - RESP 291 401 – Neonatal – Pediatric Clinical
  - RESP 291 ELA – Neonatal – Pediatric Clinical
  - RESP 291 NGA – Neonatal – Pediatric Clinical
  - RESP 292 ELA – Adult Critical Care Clinical
  - RESP 292 NGA – Adult Critical Care Clinical

### RELATED EXPERIENCE

#### Zeeland Community Hospital

1997-2007

- Spoke on asthma, chronic obstructive pulmonary disease, lung disorders, and various health issues.



- Presentations to healthcare professionals, grade school teachers, and lay public via radio, health seminars, newspaper articles, and schools.
- Instrumental in initiating and teaching ER Chest Pain Pathway, CO<sub>2</sub> Retention Screening, and Mock Codes for Respiratory and Nursing staff.
- Provided training of Cardiopulmonary and allied healthcare staff in the various treatment modalities in the field of cardiopulmonary care.

**Asthma Network of West Michigan****1997-2008**

- Speaker's Bureau for spirometry and asthma presentations.
- Presentations to healthcare professionals on advanced asthma management.

**Michigan Society for Respiratory Care****2004--2006**

- Co-chaired and developed the Michigan Society for Respiratory Care 1997 Fall Pulmonary Diagnostics Seminar.
- Developed and presented spirometry Created and presented the pulmonary function testing (PFT) section of the MSRC's Asthma Information Review (AIR) CEU education for healthcare professionals.

**Spectrum Health, Grand Rapids, MI****1992 – 1997**

- Trained respiratory therapists and nurses in various diagnostic modes of testing with the interpretation and significance of the results on patient care.

**United Memorial Hospital (UMH), Greenville, MI****1987 - 1992**

- Trained respiratory therapists and nurses in the management of the respiratory patient.
- Provided CPR and various healthcare issues-related seminars training to the lay public.

**Spectrum Health, Grand Rapids, MI****1982 - 1987**

- Presented "Hospitality" training course to multi-disciplinary personnel.

**Teaching Assistant - Ecology****1978**

- Developed and presented two lectures, quizzes, and homework for one semester.

**PUBLICATIONS AND PAPERS**

*"Therapist-Administered Sedation during Bronchoscopy" - Article submitted to the American Association for Respiratory Care (AARC) Pulmonary Diagnostics Newsletter in 1996.*

**CERTIFICATIONS/MEMBERSHIPS**

Registered Pulmonary Function Technologist (RPFT), 1995  
 Registered Respiratory Therapist (RRT), 1985  
 American Association for Respiratory Care (AARC)  
 Michigan Society for Respiratory Care (MSRC)  
 Asthma Network of West Michigan - Board member

**Gary Jeromin MA RRT**  
376 Lodge Lane  
Kalamazoo, Michigan 49009  
(269) 375-8449  
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## **Experience**

<b>Associate Professor – Respiratory Care</b> Ferris State University College of Allied Health Sciences Big Rapids, Michigan 49307	<b>2007 - Present</b>
<b>Manager, Respiratory Therapy</b> Metron Integrated Health Systems 3075 Orchard Vista Dr. SE, Grand Rapids, Michigan 49646	2002-2007 616-957-3957
<b>Lead Respiratory Therapist</b> Lincare 3588 Roger B Chaffee Dr, Grand Rapids, Michigan 49548	2001-2002 800-560-1247
<b>Surveyor</b> The Joint Commission on Accreditation of Healthcare Organizations One Renaissance Blvd Oakbrook Terrace, Illinois 60181	1999-2000 (630) 792-5000
<b>Lead Respiratory Therapist</b> Apria Healthcare 5234 Azo Court Kalamazoo, Michigan 49009	1996-2001 (269) 342-0022
<b>Director, Respiratory Therapy</b> White&White of Southern Michigan -Company Purchased by Lincare 1521 East ML Ave Kalamazoo, Michigan 49001	1991-1996
<b>Director Respiratory Therapy</b> Manager, Respiratory/Information Systems **CareTec Inc **Company was purchased by White&White Kalamazoo, Michigan 49001	1988-1990 1986-1988 3500 Sprinkle Road
<b>Manager Pulmonary Diagnostics</b> Borgess Medical Center – Pulmonary Services Dept. 1500 Gull Road Kalamazoo, Michigan 49001	1984-1986
<b>Clinical Application Specialist</b> Borgess Medical Center – Pulmonary Services Dept. 1500 Gull Road Kalamazoo, Michigan 49001	1979-1984
<b>Instructor – Respiratory Care</b> Ferris State College Big Rapids, Michigan 49307	1972-1979

## **Credentials**

Registered Respiratory Therapist NBRC #1596

Licensed Respiratory Therapist – State of Michigan – License #4401003853

## **Education**

Associate Degree in Social Sciences

Flint Jr College 1968

Associate Degree in Respiratory Therapy

Washtenaw Community College 1971

Bachelors Science Degree In Psychology/Chemistry

Eastern Michigan University 1970

Masters Arts Degree in Exercise Science

Western Michigan University 1985

~I have taken 20 hrs in business classes at KVCC and Davenport College

## **Accomplishments**

AARC AARC Delegate and Chairman- Public Relations Committee – MSRC January 2007

“President’s Award” – MSRC March 2007

AARC Delegate and Chairman- Public Relations Committee – MSRC January 2007

Filmed, Directed, Produced – Viasys/Pulmonetic Systems –LTV Training DVD 2006

Filmed, Directed and Produced – MSRC National Respiratory Care Week DVD, 2006

Video Producer privileges, Kalamazoo Community Access Center, March 2006

Chairman Public Relations and Longterm Care Committee - Michigan Society Respiratory Care 2006

Filmed, Directed and Produced – MSRC National Respiratory Care Week DVD, 2005

Chairman Public Relations and Longterm Care Committee - Michigan Society Respiratory Care 2005

Chairman Public Relations and Longterm Care Committee - Michigan Society Respiratory Care 2004

Chairman Longterm/Subacute Care Section - Michigan Society Respiratory Care (2003)

Member 'Panel of Excellence' at Apria which developed working clinical policies. (1997-98)

Board of Directors at Michigan Rehabilitative Homes Inc. (1988-1990)

Member YMCA Corporate Olympics -Steering Committee (1988-89)

President - KACUS (Apple Computer) Club (1982-1989)

Chairman Clinical Research Committee -American Association for Respiratory Care (1980-82)

Co-Director "Run For The Health of IT" -Borgess Medical Center (1980-85)

Consultant, US Navy/American Institute for Biological Science

Systems Approach To Navy Medical Education and Training Project, 1974

Hockey Coach -Ferris State University (1973-1975)

**Speaking** AARC World Congress - Dec 2007 *Goover*

*MSRC Spring Conference*  
What is Sleep- Borgess Medical Center – April 2006

What is Sleep- St Mary’s Hospital – October 2006

Public “Sleep Awareness Program” -Metron Integrated Health Systems – 2005 - present

“The Perfect Home Ventilator Discharge”

Discharge Planner Conference, Grand Rapids Michigan, October 2003

Computerization of a Respiratory Therapy Department  
Massachusetts Society for Respiratory Therapy, Annual Meeting, October 1984

Quality Control in the PFT Lab,  
Borgess Medical Center, 5th Annual Pulmonary Symposium, June 1984

Respiratory Physiology in Exercise  
HEPR Department, Western Michigan University, June 1984

Medical Aspects of Extreme Exercise Training  
Exercise Symposium, Lake Michigan College, Hartford Michigan May 1983

The Effects of Maximal Exercise Testing and Evaluation  
Pulmonary Rehab Symposium, Borgess Medical Center, March 1981

How To Conduct Clinical Research  
AART Summer Forum, St Petersburg Florida, July 1982

Methacholine Challenge Testing - The Safe Protocol  
Annual Meeting, ACCP - American College Chest Physicians, Philadelphia Pa, March 1983

The Implications of Clinical Research Design on Experimental Results  
AART Annual Meeting, Anaheim Calif, December 1981

The Limitations of Microcomputers in Clinical Research  
AART Annual Meeting, Anaheim Calif, December 1981

Exercise Testing and Evaluation  
Pulmonary Rehab Symposium, Borgess Medical Center, March 1981

The Effects of Maximal Exercise Testing on Ear Oximetry  
Abstract, Open Forum, AART Annual Meeting, Dallas Texas, 1980

### ***Publications***

Heliox Expansion Factor on the Pulmonetics LTV1000 Ventilator  
April 2006

\*Submitted for review for Respiratory Care

Trach Tube Change Risk  
MSRC Newsletter, February 2006

**Cheri Durst**  
14650 Pine Lake Avenue, Cedar Springs, MI 49319  
(616) 240-0891 ▪ durstc@ferris.edu

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### **Objective**

Seeking a full-time position in the health care sector as a Respiratory Therapy instructor where I may utilize my education and experience to positively impact the goals of your organization and the profession as a whole.

### **Summary of Qualifications**

Three years of higher education instruction including online format  
Experience in curriculum and course design  
Twenty years of staff therapy experience  
Eleven years of patient education and case management experience

### **Education**

Ferris State University	Big Rapids, MI
Master of Science, Career and Technical Education, projected graduation 5/2010	
Ferris State University	Big Rapids, MI
Bachelor of Science	1997
Ferris State University	Big Rapids, MI
Associate in Applied Science	1987

### **Employment**

Ferris State University	Big Rapids, MI	March 2006-present
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Clinical Coordinator for Respiratory Care Program

- Advise students
- Instruct online courses
- Teach clinical procedures in the laboratory setting
- Manage and support clinical preceptors
- Assign and monitor clinical rotations for 150 students
- Initiate and maintain Affiliation Agreements and working relationships with at least 40 clinical sites
- Continually update and implement curriculum changes

Asthma Network of West Michigan	Grand Rapids, MI	Feb 2002-May 2006
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Case Manager/Asthma Educator

- Provided asthma education services in the home, school and physician office settings
- Advocated/referred patients to local resources
- Facilitated smoking cessation program
- Coordinated advertising and marketing efforts
- Recruited new members and developed format that recognized contributions of existing members
- Streamlined database and outcomes process
- Participated in numerous health fairs and community events

United Memorial Health System, Greenville, MI February 1998-May 2002  
Pulmonary Rehab Manager

- Developed and presented patient education segments
- Implemented education in Powerpoint format
- Monitored individual exercise programs
- Provided case management services
- Developed and maintained outcomes database
- Coordinated advertising and marketing efforts
- Coordinated monthly Better Breathers Club

United Lifestyles Greenville, MI February 1998-May 2002  
Asthma Management Coordinator

- Developed and presented patient education segments
- Implemented education in Powerpoint format
- Developed and maintained outcomes database
- Coordinated advertising and marketing efforts
- Utilized various teaching techniques to ensure patient understanding and compliance with asthma meds and equipment
- Participated in numerous health fairs and community events

United Memorial Health System Greenville, MI February 1994-August 1998  
Respiratory Therapy Staff

- Performed, assessed and monitored many therapeutic modalities including the following:
- Arterial blood gases
- Aerosol/SVN/MDI/DPI therapy
- BLS
- Cardiac stress testing
- Chest physical therapy
- EKG
- Holter monitor
- Oxygen therapy
- Spirometry
- Ventilator management

### **Certifications**

Certified Asthma Educator 2004

Certified Global Career Development Facilitator 2008

### **Technical Skills**

Computer skills: MS Word, Access, Excel, Powerpoint, Blackboard

### **PROFESSIONAL ORGANIZATIONS**

- American Association for Respiratory Care
- Michigan Society for Respiratory Care
- Faculty member for Asthma Information Review Course
- National Career Development Association

References Available Upon Request

## **Appendix D: Assessment Plan**

### **Ferris State University Respiratory Care Program Framework**

#### **Mission:**

Building upon the mission, vision and values of the College of Allied Health Sciences, the Respiratory Care program prepares highly qualified and competent professionals for successful and rewarding careers as respiratory therapists.

#### **Program Outcomes**

1. Graduates of the Respiratory Care Program will utilize the knowledge and professional competencies required to practice as an entry-level Respiratory Therapist.
2. Graduates of the Respiratory Care Program will communicate effectively as a member of an interdisciplinary health care team.
3. Graduates of the Respiratory Care Program will apply previously learned knowledge to the solution of new problems.
4. Graduates of the Respiratory Care Program will demonstrate professional and ethical behaviors.
5. The Respiratory Care Program will continue to meet the standards of the Commission on Accreditation of Allied Health Programs and the Committee on Accreditation for Respiratory Care to maintain specialized accreditation.

## Respiratory Care Program Assessment Plan

Program Outcome	Assessment Method(s)	Criteria
<p>1. Graduates of the Respiratory Care Program will utilize the knowledge and professional competencies required to practice as an entry-level Respiratory Therapist.</p>	<p>Preceptor performance evaluations in the clinical setting.</p> <p>Certification in Respiratory Therapy (CRT) Licensure Exam</p> <p>Registered Respiratory Therapy (RRT) Credentialing Written Exam</p> <p>Registered Respiratory Therapy (RRT) Credentialing Simulation Exam</p>	<p>90% of students will be rated at a score of 3 or higher on the grading criteria for clinical performance.</p> <p>80% of graduates will pass the CRT exam within 1 year of graduation. (CoARC)</p> <p>80% of graduates will pass the RRT written exam within 2 years of graduation. (CoARC)</p> <p>80% of graduates will pass the RRT simulation exam within 2 years of graduation. (CoARC)</p>
<p>2. Graduates of the Respiratory Care Program will communicate effectively as a member of an interdisciplinary health care team.</p>	<p>Preceptor performance evaluations in the clinical setting.</p> <p>Employer Surveys:</p> <ul style="list-style-type: none"> <li>• Affective Success</li> </ul>	<p>90% of students will be rated at a score of 3 or higher on the communication grading criteria for clinical performance</p> <p>90% of graduates will be rated by their employer as average or above when compared to other RT graduates.</p>
<p>3. Graduates of the Respiratory Care Program will apply previously learned knowledge to the solution of new problems.</p>	<p>Preceptor performance evaluations in the clinical setting.</p> <p>Certification in Respiratory Therapy (CRT) Licensure Exam</p> <p>Registered Respiratory Therapy (RRT) Credentialing Written Exam</p> <p>Registered Respiratory Therapy (RRT) Credentialing Simulation Exam</p> <p>Employment Rates</p>	<p>90% of students will be rated at a score of 3 or higher on the grading criteria for clinical performance.</p> <p>80% of graduates will pass the CRT exam within 1 year of graduation. (CoARC)</p> <p>80% of graduates will pass the RRT written exam within 2 years of graduation. (CoARC)</p> <p>80% of graduates will pass the RRT simulation exam within 2 years of graduation. (CoARC)</p> <p>70% of graduates will be employed as Respiratory Therapists within 1 year of graduation. (CoARC)</p> <p>80% of graduates will be rated by their</p>



	Employer Surveys: <ul style="list-style-type: none"> <li>• Cognitive Success</li> <li>• Psychomotor Success</li> </ul>	employer as average or above when compared to other RT graduates.
4. Graduates of the Respiratory Care Program will demonstrate professional and ethical behaviors.	Preceptor performance evaluations in the clinical setting.  Employer Surveys: Affective Success  Graduate surveys: <ul style="list-style-type: none"> <li>• Advanced Degree completion</li> <li>• Professional Involvement Roles</li> </ul>	90% of students will be rated at a score of 3 or higher on the professional and ethical grading criteria for clinical performance in RESP 292  90% of graduates will be rated by their employer as average or above when compared to other RT graduates.  50% of graduates report that they are working on an advanced degree 50% of graduates report that they hold membership in the professional organization.
5. The Respiratory Care Program will continue to meet the standards of the Commission on Accreditation of Allied Health Programs and the Committee on Accreditation for Respiratory Care to maintain specialized accreditation.	Attrition Rates per cohort  Graduation Rates per cohort  Certification in Respiratory Therapy (CRT) Licensure Exam  Registered Respiratory Therapy (RRT) Credentialing Written Exam  Registered Respiratory Therapy (RRT) Credentialing Simulation Exam  Employment Rates	The program will report an attrition rate of less than 30% per cohort. (CoARC)  70% of students admitted to the program will complete the program within 3 years. (CoARC)  80% of graduates will pass the CRT exam within 1 year of graduation. (CoARC)  80% of graduates will pass the RRT written exam within 2 years of graduation. (CoARC)  80% of graduates will pass the RRT simulation exam within 2 years of graduation. (CoARC)  70% of graduates will be employed as Respiratory Therapists within 1 year of graduation. (CoARC)



COLLEGE OF ALLIED HEALTH SCIENCES

August 10, 2009

TO: Members of the Academic Program Review Committee

FROM: Ellen J. Haneline, Ph.D. Dean-College of Allied Health Sciences

RE: Respiratory Care Program

**Health of the program**

The mission of the dental hygiene program is in congruence with the university mission. Both espouse dedication to the preparation of students for successful careers and cite the importance of life-long learning. Graduates demonstrate the adherence of the program to its mission as evidenced by comments from employers and graduates. Graduates are perceived as being competent practitioners.

On-campus, all qualified students who have made application to the professional sequence have been accepted into the program. The program, with its large off campus student population has been able to meet the demands of students throughout much of the state of Michigan. Since the time of the last academic program review, respiratory care courses have been offered in Gaylord, Escanaba, Alpena, Harrison, Lansing, and Grand Rapids in addition to the offering on the campus in Big Rapids. The offering in Gaylord has been discontinued because of low student demand and the offerings in Escanaba and Alpena will end with the graduation of the currently enrolled students for the same reason. Respiratory care courses will be offered in Fall in Petosky for the first time. Employment rate for graduates is 100% attesting in part to the visibility of the program and the demand for graduates.

All faculty members within the program are credentialed as respiratory therapists and all possess degrees appropriate for their teaching assignments. In addition to the on-campus faculty, the program employs multiple adjunct faculty to provide instruction at the off-campus sites. Since the time of the last academic program review, there has been a complete turn-over in the faculty of the program. Two tenure-track faculty members were hired in the Fall, 2007 and a 3-year, 12 month faculty member was hired in the Fall of 2008. Beginning in the Fall, 2009 the faculty position in Grand Rapids will be discontinued and the courses offered by on-campus and adjunct faculty members. The Grand Rapids faculty member is being discontinued because of the hire of advisors dedicated to off campus students and the need to more closely align the program in Grand Rapids with that on campus.

The complete turn over in faculty has presented numerous challenges for the current faculty who were hired without experience in the educational setting. There continue to be issues surrounding classroom management, organization of courses, development of policies,

understanding the scope of the program and planning to assure quality of delivery among and between on-campus and off-campus sites. The implementation of the revised curriculum will provide faculty with the opportunity to work together to address the continuing issues. I expect that significant progress will be made in reducing number of student complaints by the end of the current academic year.

### **Future Goals**

Programmatic faculty will continue to enhance their efforts in demonstration of student learning through programmatic and course level assessment. It is critical that a thorough review of the application process be undertaken during the fall semester to assure that students will be able to complete the program within the two years allocated. In addition, the program is challenged to assure uniformity of instruction in the various locations where the program is offered.

### **Adequacy of Resources**

Laboratory space is sufficient to meet the demands of the currently enrolled students. Throughout the past several academic years, the program has added numerous pieces of equipment to enhance the learning environment in the laboratory on-campus and in Grand Rapids. Although resources can be variable in the off campus settings, the program faculty work diligently toward assuring that the experiences of students in the on and off campus laboratories is equal. Students from all sites are able to perform in the clinical setting attesting to the fact that resources are adequate to meet the needs of the students.

Increased enrollment in the pre- respiratory care program, along with others in the CAHS has resulted in additional stressors placed on courses in the College of Arts and Sciences, especially in the Biology and Physical Sciences department. The end result is that students have difficulty fulfilling their qualification requirements. In addition, there is a need for additional sections of on-line cultural enrichment, social awareness, mathematics and writing courses to meet the needs of the on-line student enrolled at distant sites.

**To: Members of Program Review Committee**  
**From: Theresa A. Raglin, Department Head**  
**Date: August 11, 2009**  
**Re: Respiratory Care Program**

***Health of the Program***

The Respiratory Care Program is a vital program within the College of Allied Health Sciences. It continues to meet the Mission of Ferris State University. The program is the only COARC/CAAHEP accredited university based Respiratory Care program in the State of Michigan. The overall structure of the respiratory care program with off-campus cohorts and online courses is a testament to the willingness of the program to meet to the needs of students and profession. Courses have been held in Alpena, Escanaba, Grand Rapids, Lansing and Harrison. There continues to be a demand and interest for enrollment in the Respiratory Care Program as evidenced by the 123 applicants in 2008 and 155 applicants in 2009. The off-campus format allows many non-traditional and off-site students who may otherwise not have been able to pursue this career path to receive training in a field that is in need of a greater number of practitioners.

Respiratory therapy technicians have a positive job outlook. There is projected to be a 19% increase in the growth of jobs for respiratory care practitioners between 2006-2016. The average employment rate for the Respiratory Care program over the past 3 years is 92.8%. Early employment data for the May 2009 graduates already demonstrates a 77.8% employment rate while 100% of the 2008 graduates are employed in respiratory care.

The faculty members in the Respiratory Care program are highly qualified and credentialed respiratory therapists. The program utilizes experienced adjunct faculty to instruct the off-site programs as well as hospital-based RRTs to instruct and supervise students in their clinical rotations. This allows continuity of instruction for the students and familiarity of faculty for hospital staff.

As a testament to the program and faculty, the results of the entry level respiratory therapist exam (CRT) have risen and remain above the national average. The first time pass rate is 88.3% as compared to the national average of 79.31%. However, the advanced respiratory therapist exam (RRT) results are a 46.9% first time pass rate compared to the national average of 70.94%. And the Clinical Simulation Exam (CSE) pass rate is slightly below with a 58.6% for first time pass rate compared to the national average of 64.25%. Even though the entry level CRT Exam pass rate is above the national average, the advanced RRT Exam and CSE exam results are below the national average and will need to be monitored.

***Adequacy of Resources***

Resources are adequate to support and meet the needs of the existing program, faculty and students; however, competition for clinical sites remains a problem. Even though there is an increased interest in the program, enrollment in the program remains limited due to the availability of clinical sites.

### ***Future Goals***

It is apparent that the respiratory care program is very responsive to the need for change and strives to address these needs in an effective manner. The results received through this academic review process have already begun to be addressed by the program as part of a major curriculum revision. Programmatic and course assessment will be vital to demonstrate the results of this new curriculum in Fall 2010 especially as we monitor the advanced respiratory therapist exam (RRT) and Clinical Simulation Exam (CSE) results.

Future directions of the program will continue to address the needs of students, employers and the field of respiratory care while maintaining a strong curriculum founded on solid pedagogical principles.