

Midland College

Master Syllabus

Program: Respiratory Care

Course Title: Clinical II

RSPT 1360

Course Description: A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. (0-0-16)

End-of Course Outcomes: As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry; and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry.

Prerequisites: RSPT 1160, RSPT 1410, RSPT 1340, RSPT 1201

Co-requisites: RSPT 1113, RSPT 1311, RSPT 2310

Instructional Materials:

Text, References and Supplies:

Colbert, J. C., & Gonzalez III, L. S., (2016). *Integrated Cardiopulmonary Pharmacology* (4th). California: BVT Publishing.

Kacmarek, Stoller and Heuer, Egan's Fundamentals of Respiratory Care, 11th edition, St. Louis, Missouri; Mosby, 2017

Kacmarek, R. M., Dimas, S., & Mack, C. W. The Essentials of Respiratory Care 4th edition, St. Louis, Missouri, Elsevier. 2005

Student Contributions, Responsibilities and Class Policies:

Each student will spend at least 8 hours per week preparing for class. Attendance is critical in this class. All clinical performance and behavior is considered academic. Students are expected to observe the guidelines for behavior in the clinical agency:

1. Students are to adhere to the guidelines outlined by the clinical agencies during orientation.
2. Students may not bring children to the clinical agency at any time.
3. Students should be in the clinical agency only when supervised or with the permission of their instructor. In those instances students should adhere strictly to agency guidelines in terms of chart review, visiting with patients and proper attire.
4. Students are to park in designated areas only.
5. Students may not use cell phones in the clinical setting and pagers/beepers, if used must be set on silence during clinical.

6. Students are subject to all policies regarding drugs, alcohol and criminal background checks of assigned clinical facilities, including drug screening prior to starting a clinical rotation, random drug testing and background checks.

It is expected that students remain at the clinical agency/organization/facility for the entire time period assigned. Students should not expect to run personal errands or otherwise leave the clinical site during scheduled meal times or breaks. Emergency requests are granted at the discretion of the instructor and no student shall leave the clinical site without instructor approval prior to leaving. Extenuating circumstances should be brought to the attention of the clinical director as soon as possible. If the student will be absent; the student is responsible for notifying the clinical site and the clinical instructor.

Course Objectives and Student Learning Outcomes:

During the course of Clinical II, students may perform, but are not limited to the following:

I. PATIENT DATA

A. Evaluate Data in the Patient Record

1. Patient history, for example
 - a) History of present illness (HPI)
 - b) Orders
 - c) Medication reconciliation
 - d) Progress notes
 - e) DNR status / advance directives
 - f) Social, family, and medical history
2. Physical examination relative to the cardiopulmonary system
3. Lines and drains
 - a) Chest tube
 - b) Vascular lines
 - c) Artificial airway
4. Laboratory results, for example,
 - a) CBC
 - b) Electrolytes
 - c) Coagulation studies
 - d) Sputum culture and sensitivities
 - e) Cardiac biomarkers
5. Blood gas analysis and/or hemoximetry (CO-oximetry) results
6. Imaging study results, for example
 - a) Chest radiograph
 - b) CT scan
 - c) PET scan
 - d) Ventilation / perfusion scan
7. Trends in monitoring results
 - a) Vital signs
 - b) Noninvasive, for example • Pulse oximetry
8. Determination of a patient's pathophysiological state

B. Perform Clinical Assessment

1. Interviewing a patient to assess

- a) Level of consciousness and orientation, emotional state, and ability to cooperate
- b) Level of pain
- c) Shortness of breath, sputum production, and exercise tolerance
- d) Smoking history
- e) Environmental exposures
- f) Activities of daily living
- g) Learning needs, for example
 - Literacy
 - Preferred learning style
 - Social / cultural

2. Performing inspection to assess

- a) General appearance
- b) Characteristics of the airway, for example
 - Patency
 - Tracheal shift
- c) Cough, sputum amount and character
- d) Skin integrity, for example,
 - Pressure ulcers
 - Stoma site

3. Palpating to assess

- a) Pulse, rhythm, intensity
- b) Accessory muscle activity
- c) Asymmetrical chest movements, tactile fremitus, crepitus, tenderness, tactile rhonchi, and / or tracheal deviation

4. Performing diagnostic chest percussion

5. Auscultating to assess

- a) Breath sounds
- b) Blood pressure

6. Reviewing a chest radiograph to assess

- a) Quality of imaging, for example
 - Patient positioning
 - Penetration
 - Lung inflation
- b) Heart size and position
- c) Presence of, or change in cardiopulmonary abnormalities, for example
 - Pneumothorax
 - Consolidation
 - Pleural effusion
 - Pulmonary edema
 - Pulmonary artery size
- d) Presence of, or change in diaphragm, mediastinum and / or trachea

C. Perform Procedures to Gather Clinical Information

1. 12-lead ECG
2. Noninvasive monitoring, for example
 - a) Pulse oximetry
3. Peak flow
4. Blood gas sample collection
5. Blood gas analysis and / or hemoximetry (CO-oximetry)
6. Cardiopulmonary calculations, for example
 - a) $P(A-a)O_2$
 - b) VD/VT
 - c) P/F
7. Sputum induction

D. Evaluate Procedure Results

1. Noninvasive monitoring, for example
 - a) Pulse oximetry
2. Peak flow
3. Blood gas analysis and / or hemoximetry (CO-oximetry)
4. Cardiopulmonary calculations, for example
 - a) $P(A-a)O_2$
 - b) VD/VT
 - c) P/F

E. Recommend Diagnostic Procedures

1. Testing for tuberculosis
2. Laboratory tests, for example
 - a) CBC
 - b) Electrolytes
 - c) Coagulation studies
 - d) Sputum culture and sensitivities
3. Imaging studies
4. Noninvasive monitoring, for example
 - a) Pulse oximetry
5. Blood gas and/or hemoximetry (CO-oximetry)
6. ECG

II. TROUBLESHOOTING AND QUALITY CONTROL OF EQUIPMENT, AND INFECTION CONTROL

A. Assemble / Troubleshoot Devices

1. Medical gas delivery interfaces, for example
 - a) Mask
 - b) Cannula
 - c) Heated high-flow nasal cannula
2. Long-term oxygen therapy
3. Medical gas delivery, metering, and/or clinical analyzing devices, for example
 - a) Flowmeter
 - b) Regulator
 - c) Gas cylinder

4. Humidifiers
5. Nebulizers
6. Metered-dose inhalers, spacers, and valved holding chambers
7. Dry powder inhalers (DPI)
8. Blood analyzers, for example
 - a) Hemoximetry (CO-oximetry)
 - b) Point of care
 - c) Blood gas
9. Patient breathing circuits
10. Hyperinflation devices
11. Secretion clearance devices
12. Heliox delivery device
13. Noninvasive monitoring, for example
 - a) Pulse oximeter

B. Ensure Infection Prevention

1. Adhering to infection prevention policies and procedures, for example
 - a) Standard Precautions
 - b) Donning/doffing
 - c) Isolation
2. Adhering to disinfection policies and procedures
3. Proper handling of biohazardous materials

C. Perform Quality Control Procedures

1. Blood analyzers
2. Gas analyzers

III. INITIATION AND MODIFICATION OF INTERVENTIONS

A. Maintain a Patent Airway Including the Care of Artificial Airways

1. Proper positioning of a patient
2. Performing tracheostomy care
3. Maintaining adequate humidification

B. Perform Airway Clearance and Lung Expansion Techniques

1. Postural drainage, percussion, or vibration
2. Mechanical devices, for example
 - a) High frequency chest wall oscillation
 - b) Vibratory PEP
 - c) Intrapulmonary percussive ventilation
 - d) Insufflation / exsufflation device
3. Assisted cough, for example
 - a) Huff
 - b) Abdominal thrust
4. Hyperinflation therapy
5. Inspiratory muscle training

C. Support Oxygenation and Ventilation

1. Initiating and adjusting oxygen therapy

2. Minimizing hypoxemia, for example,
 - a) Patient positioning

D. Administer Medications and Specialty Gases

1. Aerosolized preparations
 - a) Antimicrobials
 - b) Pulmonary vasodilators
 - c) Bronchodilators
 - d) Mucolytics / proteolytics
 - e) Steroids
2. Specialty gases, for example
 - a) Heliox

E. Ensure Modifications are Made to the Respiratory Care Plan

1. Treatment termination, for example
 - a) Life-threatening adverse event
2. Recommendations
 - a) Starting treatment based on patient response
 - b) Treatment of pneumothorax
 - c) Discontinuing treatment based on patient response
 - d) Consultation from a physician specialist
3. Recommendations for changes
 - a) Patient position
 - b) Oxygen therapy
 - c) Humidification
 - d) Airway clearance
 - e) Hyperinflation
4. Recommendations for pharmacologic interventions
 - a) Bronchodilators
 - b) Anti-inflammatory drugs
 - c) Mucolytics and proteolytics
 - d) Aerosolized antibiotics
 - e) Antimicrobials
 - f) Sedatives and hypnotics
 - g) Analgesics
 - h) Diuretics
 - i) Changes to drug, dosage, administration frequency, mode, or concentration

F. Utilize Evidence-Based Practice

1. Recommendations for changes in a therapeutic plan when indicated
2. Applications of guidelines, for example
 - a) NAEPP
 - b) GOLD

G. Provide Respiratory Care Techniques in High-Risk Situations

1. Intra-professional communication
2. Patient transport

a) Within a hospital

H. Conduct Patient and Family Education

1. Safety and infection control
2. Lifestyle changes, for example
 - a) Smoking cessation
 - b) Exercise
3. Disease / condition management, for example
 - a) Asthma
 - b) COPD
 - c) CF Evaluation Method

Clinical Competencies

40%

The following is a list of clinical competencies that must be completed by the last week of scheduled rotations:

- **Oxygen Therapy (Course Objectives I-III) one of the following:**
 - Nasal cannula
 - Non-rebreather
 - Partial Rebreather
 - Simple Mask
 - Venturi Mask
- **Humidity and Bland Aerosol Therapy (Course Objectives I-III) one of the following:**
 - Aerosol Mask
 - Face Tent
 - T-Bar/Briggs Adapter
 - Trach Collar
- **Aerosol Drug Administration (Course Objectives I-III)**
 - Small Volume Nebulizer
- **Lung Expansion Therapy (Course Objectives I-III)**
 - Incentive Spirometry
- **Airway Clearance Therapy (Course Objectives I-III)**
 - Metaneb

The above competencies must have two “**Assisted**” or “**Performed**” documented in Trajecsys, prior to the instructor evaluation. During the instructor evaluation the student must satisfactorily PASS the competency evaluation items, including core components. At that time APPROVE will be documented in Trajecsys and the student will receive a 100% for the competency evaluation. If the student does not satisfactorily PASS the competency evaluation items, including core components, the competency will be documented as NOT APPROVED in Trajecsys, the student will receive a 50% for that attempt, and may have one attempt at re-evaluation after approved remediation. Upon re-evaluation, the student

must satisfactorily PASS the competency evaluation items, including core components; however, an average of the two attempts (75%) will be recorded in the grade book. **If the student is unsuccessful on the re-evaluation, they will be removed from the course.**

Clinical Evaluation (Course Objectives I -III) 15%

Each clinical instructor will complete one clinical evaluation on each student assigned to their rotation.

Clinical Evaluation

SOAP Sheets (Course Objectives I-III) 20%

In RSPT 1361, the student will be required to complete 3 SOAP sheets (Due dates will correlate with the due dates for professional credits) during the clinical rotation. The date on the SOAP sheet will reflect the day the student assumed patient care. The SOAP sheets will be due on or before the assigned dates
SOAP Patient Requirements: The student is responsible for choosing a patient that can comprehensively be evaluated utilizing the SOAP sheet template. The only SOAP sheet items that may be omitted without deduction will be:

I/O, Weight (actual), Weaning Parameters, PFT Results, P/F ratio, Dynamic Compliance, Static Compliance and Airways Resistance

Clinical Written Examination (Course Objectives I-III) 20%

A final examination will be administered during the scheduled finals week. It will be comprehensive for the Respiratory Care Program to date.

Required Tasks (Course Objectives I-III) 5%

- **Trajecsys Log Requirements:** All Trajecsys logs are due by 11:59 PM on Fridays. If the student log does not reflect completion by this date each week, the logs will not be counted towards completion of the syllabus grading standard.

All students will be required to have documented “Assisted” and/or” Performed” logs and with instructor approval in the following areas:

- **ABG sampling (2 minimum) Logged under Adult Diagnostics**

(May be amended by instructor based on procedure availability) Note:

under no circumstance will student perform WITHOUT a Clinical Instructor present.

- **Mucous Clearance Adjuncts: (1 minimum) Airway clearance therapy excluding metaneb, coughing techniques, active cycle breathing, mobilization and exercise**

- **Physician Interaction:**

All physician interaction must be placed in Trajecsyst by 11:59 PM on Fridays. If the physician interaction does not reflect completion by this date each week, it will not be counted towards completion of the syllabus grading standard. All students are required to have 10 physician contact points for Clinic II logged and verified in Trajecsyst by the end of the semester.

- **Clinical Site Evaluations: ORMC, MCH, MMH**
- **Clinical Instructor Evaluations (Trajecsyst):** Each student will be required to evaluate each

instructor. Any item marked with a 2 or less is required to have constructive comments for explanation.

- **Clinical Instructor Evaluations**
- **Proof of Professional Credits:** You are required to complete 8 professional credits this semester. Professional Credit selection and completion due dates will be assigned. See Professional Credit attachment at the end of the syllabus.

If late or incomplete, the student will receive a ZERO in the gradebook.

Grading Standards:

<u>A</u>	<u>90-100%</u>
<u>B</u>	<u>80-89%</u>
<u>C</u>	<u>75-79%</u>
<u>D</u>	<u><75%</u>

*****NO LATE PAPERWORK WILL BE ACCEPTED****

Attendance:

Your attendance is the biggest predictor of your success. Attendance every clinical day is expected, however, you are allowed **TWO** days of absence. Attendance at post conference is **REQUIRED**.

Every absence over the two days will decrease the final grade for clinical by 10%. If the students are more than 15 minutes late to clinical rotations or post conference, this will constitute an absence. 3 tardies count as 1 day absent. **See “Academic Standards” and “Attendance for Clinical” in the student handbook for the proper procedure.**

Any absence or tardy will be reported to the assigned clinical instructor.

Course Schedule:

Days: Tuesday and Thursday

Time: 0600 – 1200 pm at Midland Memorial Hospital & Medical Center Hospital

0515 – 1115 at Odessa Regional Medical Center

0600 – 1200 Medical Center Hospital

**Times other than normal report times such as EKG/diagnostics will be listed on the clinical schedule.

Division Information:

Division Chairman: Miranda Poage, PhD

Division Office Location and Telephone: 208, 685-4600

Safety Training:

Students receive annual training in the following: blood and air borne pathogens, electrical safety, back safety, hazardous chemicals, latex allergies, fire and disaster procedures, security and personal safety procedures and safety requirements of clinical facilities. Students must maintain current CPR, immunizations, and health insurance during all clinical courses.

Americans with Disabilities Act (ADA):

Any student who, because of a disabling condition, may require some special arrangements in order to meet course requirements should contact the Counselor/Disability Specialist at 432-685-4505 as soon as possible. The office is located in the Scharbauer Student Center Building. These conditions may include documented physical or educational disabilities. Please be aware that services or accommodations are not automatic. Each student must request them and secure the proper authorizations/documentation.

NON-DISCRIMINATION STATEMENT:

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its program and activities. The following individuals have been designated to handle inquiries regarding the non-discrimination policies:

Wendy A. Kane

Dean of Student Life

Midland College

Title IX Coordinator/Compliance Officer

3600 N. Garfield, SSC 131

Midland, TX 79705

(432) 685-4781

Title9@midland.edu

For further information on notice of non-discrimination, visit the ED.gov Office of Civil Rights website, or call 1 (800) 421-3481.

Licensure Eligibility Notification

Completion of Midland College degrees and/or certificates does not guarantee eligibility to take a certification/registry/licensure examination. The eligibility of each person is determined on an individual basis by the regulatory body of the specific discipline. If you have a conviction of a crime other than a minor traffic violation, physical or mental disability/illness, hospitalization/treatment for chemical dependency within the past five years, current intemperate use of drugs or alcohol or a previous denial of a licensure or action by a licensing authority, you will need to contact the specific regulatory body for an individual ruling. Some programs require a criminal background check and urine and drug screen.

Professional Credits are a requirement for each clinical course in the Respiratory Care Program. You must earn a minimum number of credits each semester to successfully complete each clinical course. The number of required of professional credits per semester is as follows:

RSPT 1260	Clinical I	8 Credits
RSPT 1360	Clinical II	8 Credits
RSPT 1362	Clinical III	10 Credits
RSPT 2360	Clinical IV	10 Credits
RSPT 2361	Clinical V	10 Credits
Activities		Credits

Continuing Education (CEU's): Online or in-person	2 credits per hour
Article Summary	2 credits
Original research paper	10 credits
Community service (must obtain permission from faculty before performing community service)	1 credit per hour
TSRC/AARC membership	5 credits
Sputum Bowl Participation	8 credits
Attend TSRC convention	5 credits
TSRC student volunteer	10 credits
Attend "Better Breathers" club	2 credits per hour
In-services	2 credit per hour
Create instructional video for social media platform (must obtain permission from faculty on topic and video approval)	3 credits per video
Create recruitment video for social media platform (must obtain permission from faculty for video approval)	3 credits per video
Create a TikTok Challenge (must obtain permission from faculty on topic and video approval)	3 credits per video
Volunteer opportunity directly related to healthcare (must be approved)	2 credit per hour
Respiratory Care Week Activity	5 credits per hour
Welcome Week Activity	5 credits per hour
**Great American Smokeout (Clinic IV and V)	5 credits per hour
**A&P/classroom recruitment (Clinic IV and V)	5 credits per class visit
**Respiratory recruitment/respiratory promotion event (Clinic IV and V)	5 credits per hour
Article Summary from a Respiratory Care publication or Chest, Heart & Lung, etc.	3 credits per article
Attend local RC seminars/symposia	3 credits per hour

Each reported professional credit should be submitted with supporting documentation verifying the professional credit (examples: receipts, copy of membership card, CEU certificates, clinical instructor signature for in services, etc.) The deadline for turning in professional credits and all supporting documentation for each semester is one two weeks prior to the last day of class. Failure to turn in professional credits prior to this deadline will result in a zero for this portion of the grade. Please upload and submit all required professional credit documentation to canvas along with the professional credits form that indicates what credits you have chosen. If the professional credit selected does not provide sufficient documentation, please use the proof form attached for documentation. Please see specific course syllabus for selection due dates.

There will be a limit on how many types of professional credit you can complete each semester. For example, you cannot do *all* social media videos/challenges to achieve credits for the semester. You must choose a mix of options to achieve the points. If you have specific questions, please refer to one of the faculty members for further instructions.

Professional Credits

Name: _____

Semester: _____

Professional Credit Activities

Credits

Hours Attended:

Notes:

Student Signature:

Program organizer/supervisor name(print):

Program organizer/supervisor signature:

Date:

Examples:

Continuing Education (CEU's): Online or in-person

Any AARC approved CEU's that provide a certificate of completion. These can be found on various websites such as the AARC, TSRC, Passy Muir, last min ceu's.

Article Summary from a Respiratory Care publication or Chest, Heart & Lung, AVA etc. (Instructor must approve topic)

<p>Original research paper - complete a research paper on a topic of your choice. Find a topic that you might like to research (instructor must approve topic). Research paper must be 5-6 pages long.</p>
<p>Community service (must obtain permission from faculty before performing community service) <i>Examples:</i> Church activities, helping hands, food bank etc.</p>
<p>TSRC/AARC membership</p>
<p>Sputum Bowl Participation – Occurs during the TSRC convention, sputum bowl</p>
<p>Attend TSRC convention - occurs every July – you are required to attending the program, so it’s basically free professional credits!</p>
<p>TSRC student volunteer – You can volunteer when you attend in July or you can volunteer during any local seminar hosted by the TSRC.</p>
<p>Attend “Better Breathers” club - Meets the third Thursday of every month at 11:30 at Midland Memorial Hospital (located in the private dining). Contact Don Hill for more information.</p>
<p>In-services: you can attend in-services at the hospital if they are offered, however if you work there and they are required, this does not count. This must be something extra that you attend in a student capacity.</p>
<p>Create instructional video for social media platform (must obtain permission from faculty on topic and video approval) <i>Example:</i> Create a how-to video, about a disease process or complex procedure, make it fun and inventive in terms of explaining it.</p>
<p>Create recruitment video for social media platform (must obtain permission from faculty for video approval) – <i>Example:</i> Create a video about how amazing the profession of respiratory is and about your experiences at midland college</p>
<p>Create a respiratory related TikTok Challenge (must obtain permission from faculty on topic and video approval) – <i>Example:</i> Create a challenge for disease awareness and challenge another school to do the same.</p>
<p>Volunteer opportunity directly related to healthcare (must be approved)</p>
<p>Respiratory Care Week Activity <i>Examples:</i></p> <ul style="list-style-type: none"> • Bake cookies for RT’s at the hospital and distribute • Make cards/banner for RT’s at the hospital and distribute • Anything thoughtful/fun we can do for the RT community
<p>Welcome Week Activity</p>
<p>**Great American Smokeout (Clinic IV and V)</p>
<p>**A&P/classroom recruitment (Clinic IV and V)</p>
<p>**Respiratory recruitment/respiratory promotion event (Clinic IV and V)</p>
<p>Attend local RC seminars/symposia – Attend local TSRC, AARC, or other respiratory related local seminars that provide proof of CE’s or attendance.</p>