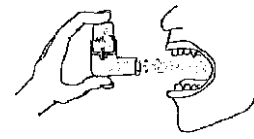
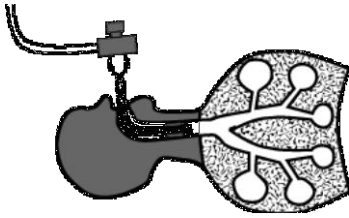


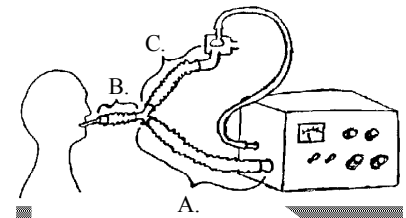
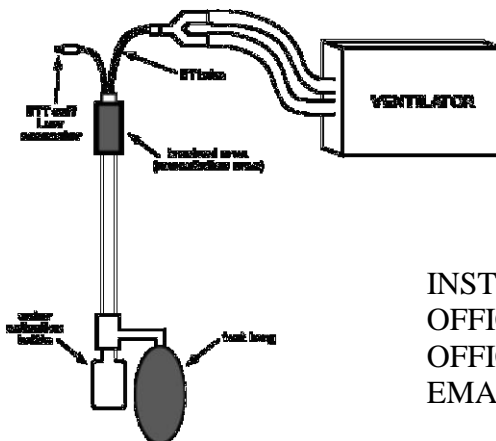
JACKSON COLLEGE
RESPIRATORY CARE PROGRAM



RES 110 RESPIRATORY CARE
TECHNIQUES II

LABORATORY
SYLLABUS and ACTIVITIES

SPRING SEMESTER 2016



INSTRUCTOR:
OFFICE:
OFFICE PHONE:
EMAIL:

Helen Grim, MS, RRT
JW 245
(517) 796-8640
grimhelen@jccmi.edu

REFERENCE MATERIAL

Required Texts:

1. Egan's Fundamentals of Resp. Care, 10th ed., Kacmarek et. al., Elsevier, 2013, ISBN 978-0-323-08203-7. (**Egan**)
2. Mosby's Resp. Care Equipment, 8th ed., Cairo, et. al., Elsevier, 2009, ISBN 978-0-323-05176-7. (**Equip**)
3. Clinical Manifestations and Assessment of Respiratory Disease, 6th ed., Des Jardins, Elsevier, 2011, ISBN 978-0-323-05727-1. (**Des Jardins**)
4. Respiratory Care Laboratory Activities: Part II, May-16
5. Lecture syllabus, unit outline, class handouts and supplement booklet.
6. Expanded Proficiency Evaluation Forms

Optional Texts:

1. The Essentials of Respiratory Therapy, 4th ed., Kacmarek, Elsevier, 2005, ISBN 978-0-323-02700-7. (**Kacmarek**)
2. Rau's Respiratory Care Pharmacology, 8th ed., Gardenhire, Elsevier, 2012, ISBN 978-0-323-07528-2. (**Rau**)
3. Clinical Blood Gases, 2nd ed., Malley, Elsevier, 2005, ISBN 978-0-7216-8422-2. (**Malley**)
4. Clinical Assessment in Respiratory Care, 6th ed., Wilkins, et. al., Elsevier, 2010, ISBN 978-1-4160-5923-3. (**Wilkins**)

NOTE: (**Bold Name**) represents how this text will be referred to when cited in unit outlines

EVALUATION

The **tentative** system for evaluation will consist of:

Labs:	35%
Lab Practical:	40%
Preparedness:	10%
<u>Attendance:</u>	<u>15%</u>

Total: 100% to be scaled to a 100 point score, then calculated into the RES 110 grade.

- **Preparedness points** are treated in the following fashion: -5 points on the first and subsequent incidences where not having required materials present in lab interferes (in the lab instructor's opinion) with performing the lab. The lab instructor will on occasion check the lab materials at the beginning of the lab day. If the lab pre-class work is **NOT totally completed, preparedness points will be deducted** for that day. **Wearing scrubs** on the day of lab is required and points will be deducted for attending in street clothes.
- **Attendance points** are treated in the following fashion: -5 points for each absence which is either unexcused or is excused but not made up. A **partial loss of attendance points will result from unsatisfactory make-up efforts for a missed lab or from significant tardiness when arriving to a lab**; the extent of point loss is at the instructor's discretion.
- **No show/no call policy**, covering scheduled or announced labs, exams or quizzes and make-up tests, is the same as for RES 110 lecture. In general, if lab is missed, there will be an **automatic 5 point deduction from the final grade for that lab**, whether the lab is made up or not. This **deduction will double** for each subsequent missed lab. Also, labs that are late will be subject to a late penalty (**-5pts/day for up to 8 days late** to give a maximum of **-40 pts** for late turn-ins; labs turned in later than 8 days will lose an additional **10 pts/week**).

GRADING

Points earned in the RES 110 Lab will apply towards the overall grade for the RES 110 class, final weighting of lab points will be determined by the RES 110 classroom instructor. In general, lab reports will be **due on the Monday following** the completed lab.

MATERIALS REQUIRED FOR LAB

1. the lab syllabus and all PEFs, textbooks and other material noted for the specific lab either on Page 2 of this syllabus **or** on the first page of the lab exercise (i.e., check the calendar and lab introduction **at least 1 full day** prior to the lab, although most will require more prep time than this)
2. RES 110 Lecture notebook
3. any lab handouts that are given out prior to lab day
4. notebook and pencil
5. calculator
6. watch with sweep second hand or stop watch feature
7. attire required: grey scrubs, JC patches
8. straight edge marked in inches & cm/mm (minimum 6 inch or 15 cm)
9. colored pencils or suitable alternative

PREPARATION OF LABS FOR GRADING

Each lab consists of a number of activities including: writing answers to questions, writing descriptions of skill performances, computing answers to math problems, labeling diagrams, etc.

Only lab pages with gradable work are to be turned in for evaluation by the lab instructor. **Lab reports** should be returned to the instructor on the **Monday of the week following the scheduled performance of the lab.**

Labs will be graded for

1. completeness,
2. proper format,
3. accuracy/correctness of information,
4. neatness/legibility of writing, and
5. promptness at being turned in (**-5%/day for up to 8 days** late to give a maximum of **-40%** for late turn-ins; labs turned in later than 8 days will lose an additional **10 pts/week**).

Lab pages are to be turned in

1. properly **sequenced**,
2. with the student **name** and **lab section number** on the appropriate line of the first page, and
3. pages **stapled**.

SEMESTER CALENDER

LABORATORY TOPIC	DATE	TEXT REFERENCES
#1 Chest Assessment - Part I (stethoscope required)	May 25	Egan ch 15, 403-410
#2 Chest Assessment - Part II (stethoscope required) Quiz - Lung Segments	June 1	Egan p. 420-435, 998 ; Kac pp 339, 344-51
Healthwise in HLC 204 9am-2pm Friday	June 3	Everyone is required to participate.
#3 Chest Assessment - Part III/Inc. Spiro.	June 8	Kac pp 574-77, 650-52 and chpt 17; Egan pp 947-952 (IS), pp 952-958 (IPPB) ; Equip pp 213-228
Acid-Base Interpretation Quiz Due	June 9	
#4 Medical Aerosol Therapy	June 15	Egan Ch. 36 pp 859-865 and box 36-6 (SVN), 865-4 and 875-7 (Heart nebulizer and continuous bronchodilator nebulization), 865-4 (small particle aerosol generator - SPAG), and 850-9 and boxes 36-1, 36-2, and 36-3 (MDI) and box 36-4 (DPI) ; Kac chpt 35
#5 Chest Physiotherapy and Alternatives	June 22	Egan chpt 40 ; Kac chpt 36; Handout.
#6 Artificial Airways and Suctioning	June 29	Egan ch 33, pp 733-740 ; Equip ch 6; Kac chpt 38, pp 684-687 (Section X.).
#7 MVB Devices and ETT Management	July 6	Egan pp 803-5 (BVMs) ; Equip pp 205-10; Kac chpt 38 Egan pp 764 ; Kac pp 683-4 (cuffs) Egan pp 749-54 (intubation); Equip pp 186-96; Kac pp 460-1 (V. & VI.)
Oxygenation Interpretation Quiz Due	July 7	
#8 Arterial Blood Sampling, Pulse Oximetry and Extubation	July 13	Egan pp 383-88, 405-10 ; Equip pp 334-337; Kac pp 265-6 (XXIV), 665-6 (VII. A., B., and C.1.)
#9 Basic PFTs Quiz - Basic Spirometry	July 20	Egan ch 19
Pulm. Physiology Math Quiz Due	July 21	
#10 Electrocardiograms	July 27	Egan Chapter 17, 805-14 ; Kac chpt 11
Review for Lab Practical	August 3	
LABORATORY PRACTICAL EXAM tentative time: 9:00am-1:00pm, EVERYBODY!	Aug 4 THURS DAY	

Equipment List

LABORATORY TOPIC	Equipment	TEXT REFERENCES
#1 Chest Assessment - Part I (stethoscope required)	Stethoscopes, pulse oximeters	Egan ch 15, 403-410
#2 Chest Assessment - Part II (stethoscope required) Quiz - Lung Segments	Wrights, NIF meter, peak flowmeters, spirometer handhelds, computers	Egan p. 420-435, 998; Kac pp 339, 344-51
#3 Chest Assessment - Part III/Inc. Spiro.	IS, IPPB, oxygen for cylinders, compressors	Kac pp 574-77, 650-52 and chpt 17; Egan pp 947-952 (IS), pp 952-958 (IPPB); Equip pp 213-228
#4 Medical Aerosol Therapy	SVN, syringes, meds, MDIs, spacers, DPIs, continuous nebs, PARI nebs, SPAG	Egan Ch. 36 pp 859-865 and box 36-6 (SVN), 865-4 and 875-7 (Heart nebulizer and continuous bronchodilator nebulization), 865-4 (small particle aerosol generator - SPAG), and 850-9 and boxes 36-1, 36-2, and 36-3 (MDI) and box 36-4 (DPI); Kac chpt 35
#5 Chest Physiotherapy and Alternatives	Beds, handheld compressors, PEP, Flutter, EzPAP, Vest	Egan chpt 40; Kac chpt 36; Handout.
#6 Artificial Airways and Suctioning	Sx machines, sx canisters and tubing, sx catheters, Ballard catheters, oral airways, nasal airways, ETTs, trach tubes	Egan ch 33, pp 733-740; Equip ch 6; Kac chpt 38, pp 684-687 (Section X.).
#7 MVB Devices and ETT Management	MVBs, MVB masks, analyzers, TTLs, ETTs, cufflators, syringes with stopcocks, stethoscopes, intubation mannequins, laryngoscopes, Magill forceps, syringes, tongue blades, tape, demand valve resuscitators	Egan pp 803-5 (BVMs); Equip pp 205-10; Kac chpt 38 Egan pp 764; Kac pp 683-4 (cuffs) Egan pp 749-54 (intubation); Equip pp 186-96; Kac pp 460-1 (V. & VI.)
#8 Arterial Blood Sampling, Pulse Oximetry and Extubation	ABG kits, ABG sampling arm, oximeters, , intubation mannequins, laryngoscopes, Magill forceps, syringes, tongue blades, tape	Egan pp 383-88, 405-10; Equip pp 334-337; Kac pp 265-6 (XXIV), 665-6 (VII. A., B., and C.I.)
#9 Basic PFTs	rulers	Egan ch 19
#10 Electrocardiograms Quiz - Basic Spirometry	EKG machines, EKG monitors, EKG paper	Egan Chapter 17, 805-14; Kac chpt 11
#11 Review for Lab Practical		
LABORATORY PRACTICAL EXAM tentative time: 9:00am-1:00pm, EVERYBODY!	Aug. 4 THURSDAY	