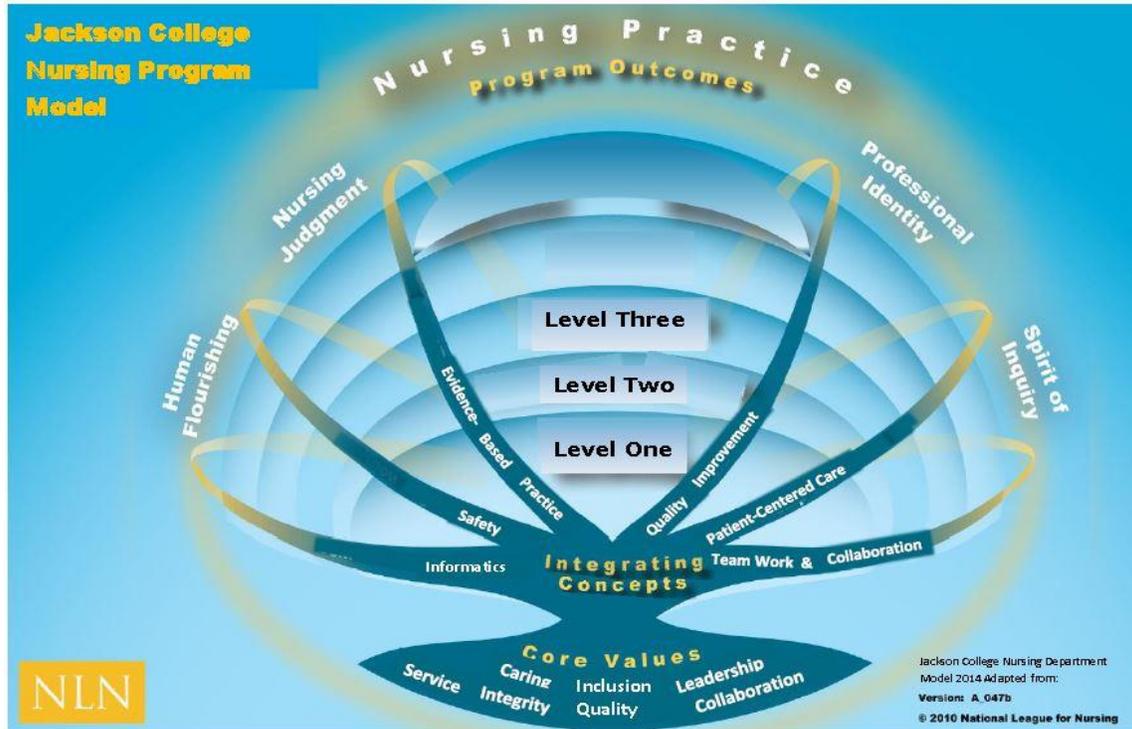


Jackson College

Jackson College Nursing Program Model



Based upon NLN Education Competencies Model / Nursing Program Model Aligned with Core Values of Jackson College

MEDICAL SURGICAL NURSING 2

NRS 214

2018 - 2019

WELCOME TO MEDICAL SURGICAL NURSING 2

Course Number NRS 214

Course Title Medical Surgical Nursing 2

Credits 4 Credits

Contact Hours: 2. 5 credits = 37.5 hours of class/ 1.5 credits = 67.5 hours of
clinical

INSTRUCTORS

OFFICE NUMBER AND PHONE

Erin Mazur, MSN, RN, FNP-BC

Whiting Hall 224

796-8483

E-Mail mazurerine@jccmi.edu

Mike McGlynn BPE, MBA, MSN, RN, CFNP

Whiting Hall 223 796-8485

E-mail mcglynnmichaelc@jccmi.edu

OFFICE HOURS

See instructor's office window for office hours.

COURSE DESCRIPTION

This course prepares the student to provide cultural responsive safe, quality care while utilizing clinical reasoning to the complex medical surgical clients and their families while reinforcing health promotion. Clinical experiences designed to reinforce theory are included in both acute care and community settings.

The Clinical Performance Guide will serve as a vehicle to evaluate the student's clinical judgment at the proficient level in order to protect and promote the health of the client. The student should be able to connect the theory taught in class with the clinical picture. The student will demonstrate the ability to interpret assessment and lab findings and taking appropriate action. Students are required to achieve a rating of satisfactory in all categories.

Program Learning Outcomes	Level Learning Outcome	Student Learning Outcome
Upon successful completion of the program, the graduate will:	Upon successful completion of the level, the student will:	Upon successful completion of the course, the student will:
<p>Human Flourishing:</p> <p>Advocate for culturally diverse clients, families, significant others, and members of the healthcare team in ways that promote self-determination, integrity, and ongoing growth as human beings to reach their maximum potential in various healthcare environments throughout the lifespan.</p> <p>Nursing Judgment:</p> <p>a. Make judgments in practice, substantiated with evidence, that integrate nursing science into the provision of safe and quality care that promotes the health of clients throughout the lifespan.</p> <p>b. Demonstrate competency in nursing health care technology and informatics to communicate, manage</p>	<p>Human Flourishing:</p> <p>Advocate for culturally diverse, increasingly complex, critically ill and/or multiple clients and their families while providing culturally responsive, evidence-based care in ways that promote self-determination, integrity, and ongoing growth.</p> <p>Nursing Judgment:</p> <p>a. Using the nursing process and evidence-based practice, prioritizes and provides safe, quality, client-centered care for increasingly complex, critically ill, and/or multiple clients.</p> <p>b. Evaluate quality improvement and analysis of aggregate data for the increasing complex,</p>	<p>Human Flourishing:</p> <p>Prioritize and integrate culturally responsive care to complex medical surgical clients and their families while reinforcing self-determination, integrity, and ongoing growth.</p> <p>Nursing Judgment:</p> <p>Integrate and prioritize the nursing process and evidence-based practice to provide safe, quality healthcare to complex medical surgical clients while reinforcing health promotion.</p>

<p>knowledge, mitigate error, and support organizational reimbursement.</p> <p>Professional Identity:</p> <p>Implement one's role as a nurse in ways that reflect integrity, responsibility, legal and ethical practices, and an evolving identity as a nurse committed to evidence-based practice, caring, advocacy and safe quality care for culturally diverse clients throughout the lifespan.</p> <p>Spirit of Inquiry:</p> <p>Evaluate evidence that underlies clinical nursing practice to challenge the status quo, question underlying assumptions, and offer new insights to improve the quality of care for clients throughout the lifespan.</p>	<p>critically ill and/or multiple clients.</p> <p>Professional Identity:</p> <p>a. Integrate legal, ethical and practice standards into the care of increasingly complex, critically ill, and/or multiple clients.</p> <p>b. Transition from the role of student to that of a graduate nurse while developing leadership characteristics.</p> <p>Spirit of Inquiry:</p> <p>Translate, question and challenge the status quo of research findings in collaboration with inter-professional healthcare teams to manage increasingly complex, critically ill, and/or multiple clients.</p>	<p>Professional Identity:</p> <p>Integrate effective, legal, ethical, and practice standards into the care of complex medical surgical clients.</p> <p>Spirit of Inquiry:</p> <p>Integrate current evidence-based research findings in collaboration with inter-professional healthcare teams in the care of complex medical surgical clients.</p>
---	---	--

Student Learning Outcomes	Behavioral Competencies
<p>Upon successful completion of the course, the student will:</p> <p>Human Flourishing:</p> <p>Prioritize and integrate culturally responsive care to complex medical surgical clients and their families while reinforcing self-determination, integrity, and ongoing growth.</p> <p>Nursing Judgment:</p>	<p>Human Flourishing:</p> <ol style="list-style-type: none"> 1. Administer prioritized, culturally responsive care to the complex medical surgical client based on client's present bio-psycho-social-cultural-spiritual situation. 2. Examine the impact of illness, hospitalization, and treatment on the family unit and consider its impact when planning care. <p>Nursing Judgment:</p>

<p>Integrate and prioritize the nursing process and evidence-based practice to provide safe, quality healthcare to complex medical surgical clients while reinforcing health promotion.</p>	<ol style="list-style-type: none"> 1. Collect and prioritize the data on the client's health status in a systematic and objective manner. 2. Prioritize individualized care based on evidence to a group of complex medical surgical clients. 3. Demonstrate the use of clinical reasoning in the integration of current knowledge to direct clinical practice decisions. 4. Utilize professional communication techniques in verbal, written, and electronic formats.
<p>Professional Identity:</p> <p>Integrate effective, legal, ethical, and practice standards into the care of complex medical surgical clients.</p>	<p>Professional Identity:</p> <ol style="list-style-type: none"> 1. Exhibit a level of professionalism that is congruent with the legal, ethical, inherent values, and behaviors of the discipline of nursing.
<p>Spirit of Inquiry:</p> <p>Integrate current evidence-based research findings in collaboration with inter-professional healthcare teams in the care of complex medical surgical clients.</p>	<p>Spirit of Inquiry:</p> <ol style="list-style-type: none"> 1. Incorporate evidence in decision making in collaboration with inter-professional health care teams while caring for complex medical surgical clients.

PREQUISITES

NRS 215 Pathophysiology, NRS 210 Medical Surgical Nursing 1, NRS 211 Care of Woman and Neonates

- OR -

NRS 215 Pathophysiology, NRS 220 Transition Bridge, NRS 222 Care of Woman and Neonates – Transition Bridge

Lecture Schedule (may change from semester to semester)

Week 1: Fluid & Electrolytes, IV, Blood Administration

Week 2: Gerontological & Musculoskeletal

Week 3: Chronic Neuro & Cardiac

Week 4: Gastrointestinal & Sensory

Week 5: Skin, Pain, & Genitourinary

STUDENT RESPONSIBILITIES

A. CLASS REQUIREMENTS

1. Attendance in class is HIGHLY recommended. If a student must be absent, it is the student's responsibility to obtain ALL lecture notes and other course information shared in class PRIOR to returning to the class.
2. Cell Phone and Texting Policy: While the nursing faculty recognizes that communication with family and friends is important, the use of cell phones in class is very distracting to other students and your instructor. Please keep all electronic devices on either vibrate or voice mail mode during class. If you are experiencing a family emergency and must keep a cell phone on, please obtain instructor permission prior to class. We appreciate your cooperating in providing an environment conducive to learning for all students.
3. Written work should be neatly done using proper grammar, spelling and punctuation, and sentence structure. Written work with three or more spelling errors or with improper sentence structure will be unsatisfactory.
4. Reading assignments (text, assigned articles, handouts, etc.) should be read for understanding before the class for which they are assigned. Class discussions and critical thinking exercises will be based on the student coming prepared to class. Students are encouraged to bring questions to class. Some questions, however, will be best answered following lecture because of limited class time.
5. Testing will be done from content objectives found in course learning guides. A student will be allowed to take a make-up test only 1 time without penalty. *Cell phones and apple watches **may not be out** during testing or while reviewing an exam. **If a student is found to have a cell phone out during testing or during test review the student will***

receive a zero on the test in question. Students will be allowed to review the test once testing is complete. Once the review is complete and grades are entered into JetNet the student will not be able to review the test again. If a student has a question or concern regarding the test or a test question it must be made at the time of the review or prior to grade being enter into JetNet.

6. A Standardized Medical-Surgical Test will be given during the course. The student must take the exam and remediate each question for a minimum of 2 minutes per question. Remediation must occur before the date of the final in-class test. Failure to remediate each question will result in a maximum grade of 1.5 in NRS 214 and dismissal from the nursing program.
7. Timed Testing: Students will be given one minute per questions when taking at test. This means that if the test is 75 questions, there will be 75 minutes to complete the test. If the student comes late when a test is being administered, the student will have the option of taking the test in the Testing Center as defined below in Test Make-Up where it will be timed or taking it in the classroom with the reduced amount of time that is remaining when the student arrives. The reason for this limitation is to prepare the student for the timed NCLEX-RN examination. Students need to learn how to pace themselves as they take a test to ensure that they finish on time.
8. Test Make-Up: A student will be allowed to take a make-up test only 1 time without penalty. If the student is taking a second test outside of the class, 5% will be subtracted from the test score. If the student takes a 3rd test outside of class, 10% will be subtracted from the test as will any further outside of class tests.

Students are strongly encouraged to be present for all tests. Students must call before the test is to be given unless there is an unforeseen event and notify the instructor they will be absent and acknowledge that they will make up the test. **Unless the student is informed otherwise, missed tests are available for makeup in the JC testing center in BW 121 two days after the test was originally scheduled during the JC testing center's open hours.** The student should contact the testing center for open hours before making a trip to the college. The student must make up the test within 1 week unless other arrangements are made.

9. GRADING TESTS:

Only answers to questions that are recorded on the student's scantron answer sheet will be graded unless instructed by the instructor at the beginning of the test in the written test directions to record answers in another place. When grading tests, faculty reserves the right to not count questions that they deem are not of good quality. In this situation, all answers will be accepted for the question(s) discarded. No additional point will be given to the student who had the question "right" prior to it being discarded. The answer marked on the scantron will be considered the student's final answer. Points will not be given for questions answered on the test booklet correctly and on the scantron incorrectly. Ensure your scantron was marked properly prior to submission.

10. All students will be required to take a mandatory Dosage Calculation Competency the first week of class. Students must earn a $\geq 90\%$ on the quiz within 3 attempts or a grade of 1.5 will be issued and the student will not advance to NRS 230. See the "Dosage Calculation Competency Requirements" document.

11. **Academic Integrity and Honesty Policy:**

Nurses are highly regarded as trusted professionals. The JC Nursing Department faculty and staff are committed to the ideals that honesty and integrity are essential qualities for the profession of nursing. At Jackson College each of us has a personal responsibility to strive for veracity, integrity, and trust in our work and relationships.

Academic integrity and honesty is expected of all students. Any student found to be cheating on an exam, quiz, or other assessment will be subjected to corrective action in accordance with the level of infraction as outlined in the Jackson College Nursing Handbook and Jackson College Academic Honesty Policy. Corrective action may include receiving a maximum grade of 1.5 for the course in mention or possibly permanent removal from the program.

CHEATING and serious violation of responsible technology use (see the Social Media/Simulation Lab Policy) can take on many forms. These may include but are not limited to:

- Bringing an answer source to the testing site. This could be a cheat sheet, cell phone, smart watch, etc.
- Copying answers or work from another student's test or project.
- Making copies or taking cell phone pictures of test or course materials including PowerPoint presentations.
- Changing an answer or work after submission.
- Sharing test information, test answers and content with someone who has not yet taken the test.
- Uploading prohibited course materials to any internet site or facilitating others to do so. Periodic audits of the internet are performed. All course

materials have been specifically prohibited for distribution by instructors unless specifically indicated otherwise. This includes but is not limited to graded quizzes and exams, group work answers, etc., along with any questions that are or might be intended for future quizzes and exams.

- Unauthorized possession or disposition of academic materials includes the unauthorized selling or purchasing of exams, quizzes, midterm projects, or other academic work; stealing or using another student's work; using information from or possessing exams/quizzes that a faculty member did not authorize for release to students.
- Facilitation of any act of academic misconduct includes knowingly assisting another to commit an act of misconduct; providing others with course materials to be uploaded digitally or to be shared manually.
- Taking quizzes with another student. Quizzes are to be done individually - do not share answers with others in person, through e-mail or on the phone. Sharing answers is considered cheating and will be treated as such.
- Plagiarism is another form of cheating. Plagiarism may involve but is not limited to submitting a paper written by someone else (obtained from the web or a fellow student) or using direct quotes from any source without crediting the source.
- Additional areas of concern specific to nursing include but are not limited to:
 - Covering up or not reporting a clinical error.
 - Charting something complete that was not done.
 - Altering any legal documents.
 - Deviation from an accepted Standard of Care or Standard of Practice.
 - Any form of lying/misrepresentation to faculty, health team members or others.

If a student is unsure if a practice might be considered cheating, he or she is advised to check with an instructor and/or do not engage in that practice.

THE BEST POLICY IS ALWAYS HONESTY AND INTEGRITY.

B. CLINICAL REQUIREMENTS

1. Attendance in clinical is required and is very important. All missed clinical time must be made up. Please refer to the attendance policy in the Nursing Handbook. The student must discuss and plan makeup arrangements with instructor. Students who miss more than 20% of the clinical hours in any individual clinical course will receive a 1.5 in the course and must repeat the entire course.
2. The student is required to call the clinical unit before assigned time if she/he will be absent or late. Tardiness to the clinical area will result in a performance notice as outlined in the Nursing Handbook.

3. The student must come prepared to the clinical area. Clinical preparation is specified in the Clinical Performance Guide (CPG). If the student comes unprepared, she/he will be given a performance notice warning and will be sent home from clinical resulting in an absence that must be made up. If there is an additional incidence, further disciplinary action will be taken as defined in the Nursing Handbook in addition to being sent home from clinical resulting in another absence that must be made up. If there is a third incidence of unsatisfactory clinical preparation, the student will fail the clinical portion of the class.
A written performance notice will be given if the student administers a medication and does not know what the medication is, the normal dose and items to check before giving (See clinical medication sheet).
4. The student should be attired and groomed as defined in the Nursing Handbook. The instructor reserves the right to determine appropriate dress in any given situation based on the uniform policy. There are no smoking breaks during clinical.
5. The Clinical Performance Guide (CPG) presents all clinical objectives as identified in the clinical evaluation tool in addition to detailing skills and abilities that will further assist the individual student to satisfactorily meet clinical objectives, actively engage in his/her own self-assessment, demonstrate accountability for learning and promote self-growth. The student's weekly recording in the CPG provides both faculty and the student with a method to monitor the student's experience and progression toward meeting clinical objectives. The individual student and faculty will jointly review the student's self-assessment and progress as noted in the CPG in the faculty's evaluation of the student's satisfactory attainment of clinical objectives. Satisfactory (S), Unsatisfactory (U), Not applicable/Not available (NA), with detailed comments will be used as grading criteria.
6. The CPG presents mandatory clinical objectives which the student must satisfactorily attain in order to pass the course. Students will be evaluated according to a satisfactory (S) or unsatisfactory (U) grading criteria. If the clinical objectives are not met, the clinical grade will be unsatisfactory and the course grade will be a failure of 1.5.

7. SMOKING POLICY:

Smoking is inconsistent with the health promotion role of nurses. Some patients, students, and faculty suffer from asthma triggered by exposure to third-hand smoke. Third hand smoke has been found to be a cancer risk to others. Please do not come to class or clinical with residual smoke on yourself, clothing, scrubs, or paperwork (as it may be returned for resubmission). Smoking or use of other tobacco products will not be permitted at any time or place during a student's clinical rotation, regardless of the setting. Students who present to the clinical setting smelling of smoke will be sent and be given a written performance notice. Being sent home will be treated as a clinical absence.

Smoking cessation services are available to the student free of charge through the Allegiance Tobacco Treatment Services. Students may contact the Tobacco Treatment Coordinator by calling (517) 788-4707 or online at www.AllegianceHealth.org/BreatheEasy.

8. Cell phone calls and texting are not appropriate in the clinical setting due to the risk of distractions, errors and HIPAA violations. Unit phone numbers will be available in case of emergency.

9. Written Clinical Assignments

The student's clinical preparation each clinical week will include:

- Critical Thinking- Prioritization Form with attached PMP/Care Pathway.
- Medication Summary
- Laboratory Summary with abnormal values and relevant normal (including entire ABG, even if part of it is normal)

Failure to submit clinical assignments will result in a Clinical Performance Notice.

10. AGENCY POLICIES: It is the student's responsibility to be informed and adhere to agency policies such as student parking, orientation modules, smoking, cell phones, and HIPPA. Failure to follow agency policy can result in the agency prohibiting the student from continuing the clinical experience at said agency. This may result in course failure and/or dismissal from the JC nursing program.

11. Students will be offered off-site observation only experiences in NRS 214. These are **observation only** experiences because there will be no clinical instructor present. Students are prohibited from assessing clients, documenting, passing medications, performing procedures, or offer advice/teaching clients.

INSTRUCTIONAL METHODS

Assigned Readings/Handouts
Clinical Experiences
Lecture/Discussion

Audiovisual materials
Collaborative Group Work

TEXTBOOK(S) REQUIRED

Electronic Versions of textbooks are available

Ackley, Betty and Ladwig, Gail. Nursing Diagnosis Handbook: A Guide to Planning Care. Mosby.

Jarvis, Physical Examination and Health Assessment, Saunders.

Ignatavicius, D.D, Workman, M.L, Rebar, C.R.: Medical-Surgical Nursing: Concepts for Interprofessional Collaborative Care 9th edition. Elsevier.

Nursing Laboratory Tests Manual of Choice.

Nursing Drug Reference Book of Choice.

AVAILABLE LEARNING SERVICES

"Students with disabilities who believe that they may need accommodations in this class are encouraged to contact the Office of Learning Support Services as soon as possible to ensure that such accommodations are implemented in a timely fashion."

The Nursing Laboratory is staffed by faculty that can assist your learning. The hours change each semester but are posted. Tutors are available through Center for Student Success in Bert Walker Hall. See your instructor if you feel this would be helpful for you. The Center for Student Success can help students with academic and personal problems. If you feel the need to talk with the

faculty, their office hours are available and posted on their office doors. Keeping communication open assists both student and faculty.

STUDENT EVALUATION CRITERIA

The grade that the student earns will be determined from the examinations in the course. An unsatisfactory performance in theory or clinical practice will constitute failure in the course. Failure to achieve a minimum of a 90% of the mandatory math competency within three attempts will result in course failure and the student will receive a 1.5 in the course. If the failure is in clinical, the student will receive a 1.5 grade in the course.

UNIT EXAMS:	A schedule of theory topics and exams will be distributed during the first class. Theory topics listed above
MED-SURG STANDARIZED EXAM:	One standardized Med-Surg Exam will be given. Each question must be remediated for 2 minutes.
CALCULATION COMPETENCY:	Mandatory Dosage Calculation Competency must be passed with $\geq 90\%$.
OTHER:	See the Nursing Handbook for evaluation behaviors based on the Code of Nursing. The minimal clinical competencies for the course are listed in the CPG.

GRADING SCALE

The total number of points on tests will be cumulative and a percentage computed to figure the final grade. The student must receive a minimum 78% average on the tests which equals a 2.0 grade which is the grade required to pass NRS 214 Medical Surgical Nursing 2. If clinical is not passed successfully, a 1.5 grade will be earned. If the student fails to achieve a minimum score of 90% on the mandatory math competency a 1.5 grade will be earned. Failure to complete the mandatory Kaplan remediation will result in a 1.5 grade being issued to the student. If the percentage includes a decimal, 0.5 or more will be rounded up to the next whole number (e.g. 83.5=84). A decimal grade of 0.4 or less will be dropped (e.g. 83.4 = 83).

4.0	94-100%
3.5	90- 93%
3.0	86- 89%
2.5	82- 85%
<u>2.0</u>	<u>78- 81%</u>
1.5	74-77%
1.0	70 - 73%
0.5	66 - 69%
0.0	< 66%

Each test will be graded utilizing the above scale. When calculating final grades if the percentage includes a decimal, 0.5 or more the grade will be rounded up to the next whole number (e.g. 83.5=84). If a decimal grade of 0.4 or less is calculated the grade will be rounded down to the nearest whole number (e.g. 83.4 = 83). If the faculty decides that a test question is not valid, everyone in the course receives one point for that question whether they got the question “right or wrong”. (This is not an additional point if the question was scored as being correct).

Participation Reporting (HQV)

Student participation feedback is provided by instructors up to 3 times per course (see Participation Reporting in the JCC catalog). The feedback is accessible via e-Services.

*V – Your instructor confirms you are participating regularly.

*H – Your instructor feels you would benefit from additional assistance and has referred you to the Center for Student Success for academic tutoring.

*Q - Your instructor believes that your lack of attendance/participation may prevent your success and has recommended to the registrar that you be dropped and/or withdrawn from the course.

MAKE-UP POLICY

Classroom attendance is not mandatory, but is HIGHLY recommended. The student is responsible for his or her own learning. In the event that the student must miss or be late to class, it is the student’s responsibility to obtain lecture notes, messages, instructions, handouts, announcements, etc. from a fellow student. The student will be held responsible for all material and information regardless of whether the student was in class. Tardiness to class may mean missing a quiz, or reduced time to take a test.

Students are strongly encouraged to be present for all exams. A student may miss only one test for makeup without point reduction. A student must arrange to take a missed exam before returning to class. A five-percent reduction in the

earned grade may be made on a student's first make-up exam. A ten-percent reduction may be made on the second make-up exam, fifteen percent on the third exam, and so on.

NURSING PROGRESSION POLICY:

See the Nursing Handbook for progression policies. The student must earn a 2.0 grade in Theory and a satisfactory in Clinical to pass the course. Students who withdraw or fail this course cannot progress into NRS 230 Medical-Surgical Nursing 3. Consult the handbook for current Progression/Readmission policy

The points that will be available in this course include:

TESTS	#of Points	Earned Points	Possible Points	Test Percent Earned divided by Possible	Total Points Earned	Total Points Possible	Course Percent Total Earned divided by Total Possible
Test 1	100 points		100			100	
Test 2	100 points		100			200	
Test 3	100 points		100			300	
Test 4	100 points		100			400	
Test 5	100 points		100			500	
Total # of points on tests	500	/500					
	Test Percent	%					

78% average required on overall course grade to pass course.

All students are required to pass a Dosage Calculation Competency with a passing score of $\geq 90\%$ to pass NRS 214 and progress to NRS 230. Students must also complete the mandatory Kaplan remediation by the assigned due date or a 1.5 will be issued for the final grade.

Note: Students are required to maintain documentation of currency in CPR/TB/Immunizations with the nursing office prior to the first day of clinical or there will be a 3% reduction in the total grade in NRS 214 and the student will not be allowed to attend clinical until the documentation is presented which may

result in a clinical absence(s). It is the student's responsibility to maintain these records without reminders from faculty.

NRS 214 MEDICAL SURGICAL 2 CLINICAL GUIDELINES

GOALS:

- 1) Clinical nursing experiences in NRS 214 Medical Surgical 2 provide instructor supervised care for patients, with a focus on elderly patients, who have partially compensatory care needs.
- 2) Students will administer specified IV fluids/medications with instructor supervision. (See IV guidelines for further details). No IVP meds except for Saline/Heparin flush.
- 3) Students will develop ability to manage RN care responsibilities for two patients and progress to 3 patients. As the number of assigned patients increases, the goal for the student is to manage more of the RN role responsibilities for several patients.

The student will:

- Obtain patient report and discuss with patient's RN the student's specific care responsibilities for the patient, especially documentation, medication administration, nursing procedures, and AM/HS care. Other team members should also be aware of the student's role. (If the student is unable to complete any patient care item the RN should be informed immediately so the care may be reassigned and completed).
- Students are responsible for communicating with all health team members at the beginning of the shift. Students MUST communicate to ALL team members exactly the nursing interventions they will provide for each one of their patients, including blood glucose monitoring, ADLs, AM/HS care, medications, administration of which IV fluids/medications, and assessment/charting. If the student does not inform team members, a performance notice will be given.
- Provide designated care for one patient initially and progress toward ability to care for two patients, and then three patients as clinical week's progress.
- Administer oral and injectable medications with instructor supervision. All insulin must be double checked with another nurse and cosigned on the medication record as well as other IV medications per hospital policy. Coumadin is also double checked after INR values are reviewed.
- Give IV fluids/medications specified in IV guidelines with instructor supervision.
- Perform nursing procedures with instructor supervision such as urinary catheters, nasogastric tube insertion, drain removal, and complex dressings.

- Complete charting including patient teaching and SOAP note as required before leaving unit.
- Report off to RN before leaving unit for breaks, conferences or at the end of the shift.

Students will NOT:

- Obtain or administer blood or blood products.
- Administer IVs other than those specified in IV guidelines.
- Give IV push medications or administer chemotherapy as specified in IV guidelines.
- Witness legal documents per hospital policy.
- Call physicians, take or note physician's orders.

NRS 214 CLINICAL IV ADMINISTRATION GUIDELINES

1. **WITH INSTRUCTOR PRESENT**, may hang peripheral IV bulks without added medications and IVPB antibiotics after reviewing appropriate lab tests. May administer IVs through PICCs and ports that have been accessed and are not being used for the first time since placement.
2. May hang peripheral TPN, lipids, Heparin infusion, and insulin infusion **with instructor present** and cosigned by patient's primary RN.
3. May do normal saline flush or heparin flush **with instructor present**.
4. Will **NOT** hang, regulate pumps, or titrate IVs containing narcotics, potassium, magnesium, chemotherapy, dopamine, dobutamine, levophed, cardizem, nitroglycerin, lidocaine, or any other serious IV medication.
5. Will **NOT** administer IVs through or provide care for central lines.
6. Will **NOT** administer IV push medications.
7. Will **NOT** change PCA medication or reprogram PCA pumps. May do history recall with supervision of instructor/nursing staff to document patient usage of medication.
8. Will **NOT** hang epidural solutions or reprogram epidural pumps.
9. Will **NOT** administer blood or blood products.

Dosage Calculation Competency Requirements

INTRODUCTION:

One of the most important nursing skills to master is safe and accurate administration of patient medications. **Students are expected to have the prior knowledge of essential basic math skills** needed for accurate calculation of medicine dosages. All nursing students should be able to confidently:

- Compute arithmetic for medical dosage calculations including but not limited to:
 - Converting fractions to decimal numbers
 - Converting decimal numbers to fractions
 - Rounding decimal numbers to fractions
 - Rounding decimal numbers for medications and desired number of places e.g., nearest whole number, tenths, or hundredths
 - Multiplying and dividing fractions
 - Simplifying fractions
 - Proper use of zeros – (**placement zeros but NO trailing zeros i.e. 0.5 not .5 or 2.5 not 2.50**)

It is the **STUDENT'S RESPONSIBILITY** to seek the needed remediation if necessary. Support services include those of the JC Center for Student Success, nursing tutor (if one is available), on-line resources, and fellow classmates. Students are expected to be able to **accurately and confidently compute** the following types of medication problems:

- Calculating dosages using a label
- Reading and measuring dosages on an intramuscular, tuberculin, and/or insulin syringes
- Calculating flow rates and durations of enteral infusions (volume divided by infusion time)
- Calculating safe dosages, minimum, maximum, and recommended dosages [mg/kg]
- Converting within and between metric and household units using one and/or two step conversions
- Calculating two medication dosages and combining the medications into the same syringe
- Calculating dosages for parental medications.
-

DIMENSIONAL ANALYSIS:

Students will be required to show all work.

ROUNDING NUMBERS - GENERAL GUIDELINES:

- Quantities > 1 are rounded to the nearest tenth i.e. $1.56 = 1.6$
- Quantities < 1 are rounded to the nearest hundredth i.e. $0.45678 = 0.46$
- Drops are rounded to the nearest whole number as drops cannot be split (5 or higher round up i.e. $26.6 \text{ gtts/min} = 27 \text{ gtts/min}$)
- Intravenous solutions are delivered in drops per minute or mL/hr on a pump
- Round adult weight to the nearest whole number unless otherwise indicated
- Oral medications are poured to the exact amount ordered, may need to use a syringe

ABBREVIATION GUIDELINES:

- Metric abbreviations are always singular
- No period after metric abbreviations except if it falls at the end of a sentence

- Nurses must master and become comfortable using approved abbreviations and metric units employed in medication administration to ensure patient safety
- Included in this handout is a reference list of common abbreviation and equivalents used in medication administration

EQUIVALENTS:

Students are required to know the most common conversions in order to accurately complete medication problems. Below are some common conversions that will be used in the math quiz. This is not an all-inclusive list.

- mcg ↔ mg ↔ g
- kg ↔ lb
- mL ↔ oz ↔ tsp ↔ tbsp.
- mL ↔ micro/macro drops
- mL ↔ L
- mg ↔ mcg
- cup ↔ oz ↔ mL

EVALUATION:

- The student will take a 10 question math competence quiz the first week of class.
- Each question will be worth 1 point a piece. No partial credit will be given.
- The quiz will be graded by the second week of class.
- **A ≥90% mastery is required.** Students who do not pass the first attempt with a 90% must retake the quiz on another day in the testing lab. It is in the student's best interest to prepare as needed!!!
- Students who do not successful pass the first quiz attempt will need to make an appointment with faculty to review the quiz.
- ALL students are required to successfully complete the math competency quiz with a score of **≥90%** by the ***end of the 4th week*** of class.
- The Math Competency Quiz ***must*** be successfully completed in three attempts or the student will earn a 1.5 in NRS 214 and not progress to NRS 230.

ACADEMIC HONESTY:

Please review the JC nursing department academic honesty policy. **All** nursing students are expected to follow these guidelines. Failure to adhere to these guidelines is grounds for dismissal from the program.

Metric Equivalents	Metric	Household
1000 mcg = 1 mg	5 mL	1 teaspoon
1000 mg = 1 g		3 teaspoons = 1 tablespoon
1000 g = 1 kg	15 mL =	1 tablespoon = ½ ounce
	30 mL =	2 tablespoons = 1 ounce
	240 mL =	1 cup = 8 ounces
	500 mL = ½ L =	1 pint

	1000 mL = 1 L =	1 quart = 32 ounces
Weight 2.2 lb = 1 kg		
Macro drop = 1 mL = 10 gtts/min		
Micro drop = 1 mL = 60 gtts/min		

Web References:

*****Math MagicFor Meds** – Go to: <http://www.edgt.com/> and register ☞ *your student access key is: S-PH-4252-6309*

<http://www.dosagehelp.com/>

http://ratguide.com/meds/reference/conversions_and_calculations.php

<http://www.ismp.org/tools/abbreviations/>