NUR260 Nursing Research and Informatics

3 units of theory
Pre-requisites: Acceptance into A-BSN program
Placement in curriculum: Prelicensure requirement

Dates: 5/9/22 – 8/25/22
Day and Time: Thursdays 1300-1600
Room: 108
Course Faculty: Dr. Dianthe Hoffman
Faculty office: Room 203
Faculty email: dhoffman@westmont.edu
Faculty phone: 559-972-6693
Faculty office hours:
   Mondays: 1200-1300 by zoom/phone
   Thursdays: 08-09, 12-13, 16-17 in office or zoom/phone
   Fridays: 0900-1100 by zoom/phone

Open door policy --- Students are welcome to meet with the instructor at any time during scheduled office hours. The student may also contact the instructor to schedule a meeting time.

* Zoom instructions - Send a text to or call my cell phone informing me that you would like to meet and then will log into Hoffman Office hours zoom link. You can use your phone, device or computer to join the meeting.

I. Important Information
This is a course in a series of prelicensure nursing courses to prepare the nursing student for the safe, patient-centered and family-supported, evidence-based, compassionate care in a variety of healthcare settings. The best way to be prepared for your lecture and clinical experience is to maintain a healthy mental, physical, and spiritual life. Come to class after a good night’s sleep, eat nutritious food, and stay current with reading assignments. To help with your success in this course and program, it is not suggested you work more than 20 hours per week if you have to work.

Westmont catalogue course description
The nursing research course explores the basics of qualitative, quantitative, and mixed methodology to explore a variety of research designs and frameworks. Research problems, purposes and hypothesis will be explained and nursing students will learn how to write a PICOT question. Students will be exposed to statistical methods for data analysis. Nursing is an evidence-based practice and students will learn the importance of nurses conducting nursing research. This course will also integrate the importance of nursing informatics as a way to measure the outcomes of patient care by tracking, trending, and analyzing the data collected through the electronic medical records and other data collection applications.
Instructor’s further description
As providers of care, you will learn quickly why the practice of nursing is evidence-based and why it is important to have bedside caregivers as nursing researchers. Who better to change practice with evidence than those at the bedside? You will learn how to read a study so you understand the purpose, design, findings, and application to our practice in nursing. You will also explore the importance of the literature review which will continue to be helpful in this program.

Writing Intensive Course
This course fulfills Westmont’s General Education requirement for a Writing Intensive Course within the Major. Students will be asked to submit and review peer drafts that call for careful attention to the written word. Content, clarity, and style will be evaluated.

Student Learning Outcomes for Writing/Speech Intensive Courses
• Communicate in written form for a variety of purposes and audiences across the curriculum

Instructional Activities
• Course requires sufficient writing—at least four papers totaling at least 16 pages—in a sequence of related Assignments.
• Writing is spread throughout the course in a sequence of related assignments.
• Writing may include journal writing, article reviews, essays, research papers, scientific lab reports, business reports and plans, lab abstracts, paper revision and editing assignments, peer reviewing and editing, etc.
• Course provides significant writing instruction, including at least one assignment with drafts.

Grading Criteria
• Ability to construct a clear central message that includes purposeful and inviting ideas, insightful arguments and reasons to accept these arguments, relevant and substantive supporting material and audience-centered appeals.
• Organization of the message, including creative introductions, compelling and strategic structure, smooth transitions, and an effective conclusion.
• Communication style, engaging the audience with discipline-appropriate language use and artfully constructed sentences.

ABSN Program Mission
Prepares faithful servant leaders to provide patient-centered and family supported safe, compassionate care for diverse populations and communities across the lifespan and in all health care settings.

AACN Baccalaureate Essentials (2018)
The Commission on Collegiate Nursing Education (CCNE) is an autonomous accrediting agency, contributing to the improvement of the public’s health. A specialized/professional accrediting agency, CCNE strives to promote the quality and integrity of baccalaureate and graduate nursing programs. Following are the nine baccalaureate essentials used as the framework for the current curriculum. In 2021 the
Essentials were revised and will be integrated into the curriculum over the next three years.

I Liberal Education for Baccalaureate Generalist Nursing Practice
II Basic Organizational and Systems Leadership for Quality Care and Patient Safety
III Scholarship for Evidence-Based Practice
IV Information Management and Application of Patient Care Technology
V Healthcare Policy, Finance, and Regulatory Environments
VI Interprofessional Communication and Collaboration for Improving Patient Health Outcomes
VII Clinical Prevention and Population Health
VIII Professionalism and Professional Values
IX Baccalaureate Generalist Nursing Practice

AACN Baccalaureate Essentials (revised 2021)
The Essentials: Core Competencies for Professional Nursing Education provides a framework for preparing individuals as members of the discipline of nursing, reflecting expectations across the trajectory of nursing education and applied experience. The Essentials introduce 10 domains that represent the essence of professional nursing practice and the expected competencies for each domain. The competencies accompanying each domain are designed to be applicable across four spheres of care (disease prevention/promotion of health and wellbeing, chronic disease care, regenerative or restorative care, and hospice/palliative/supportive care), across the lifespan, and with diverse patient populations.

Domains for Nursing
Domains are broad distinguishable areas of competence that, when considered in the aggregate, constitute a descriptive framework for the practice of nursing.

The Ten Domains:
Domain 1-Knowledge for Nursing Practice
Domain 2-Person-centered Care
Domain 3-Population Health
Domain 4-Scholarship for Nursing Practice
Domain 5-Quality and Safety
Domain 6-Interprofessional Partnerships
Domain 7-Systems-based Practice
Domain 8-Information and Healthcare Technology
Domain 9-Professionalism
Domain 10-Personal, Professionals, Leadership Development
(The Essentials: Core Competencies for Professional Nursing Education, 2021)

Quality and Safety in Nursing Education (QSEN) Competencies
1. **Patient-centered Care** - Recognizing the patient or designee(s) as the source of control and full partner in providing caring and coordinated care based on respect and diversity.

2. **Safety** - Minimizing risks of harm for patients and providers by evaluating systems and individual performances.

3. **Informatics** - Using information and technology in communicating, managing knowledge, mitigating errors, and supporting all types of decision-making.

4. **Teamwork and Collaboration** - Functioning effectively at all levels of nursing and fostering open communication amongst inter-professional team members while encouraging mutual respect and a shared achievement of safe quality care.

5. **Quality Improvement** - Continuously monitoring the healthcare system for outcomes impacting safe quality care and methods to improve design care for optimal results.

6. **Evidence-based Practice** - Integrating best current evidence with clinical experts and patient/family/groups that value the delivery of optimal healthcare.

**Program Learning Outcomes (PLO)**

1. Exhibit Christian character and servant leadership while providing compassionate care for a diverse population in communities across state, national, and global settings.

2. Evidence-based best practices, critical thinking, and clinical reasoning, inform clinical judgement for the provision of patient-centered, safe, quality care.

3. Create patient education plans that are culturally specific to the patient and that incorporate the family support system.

4. Communicate effectively with the interprofessional team to ensure a wholistic approach to patient-centered care.

5. Continue inquisitive learning by using the Electronic Medical Record and Informatics to meet quality metrics in a variety of healthcare and geographic settings.

6. Advocate for healthcare policies for the underserved, vulnerable populations to ensure equity with access to care for prevention, remedial, supportive, and rehabilitative nursing care regionally, nationally, and globally.

**Course Learning Outcomes (CLO)**

1. Discusses the importance of the literature review when beginning a research project or as a way to collect information to support scholarly writing.

2. Describes the use of informatics and evidence-based practice.

3. Uses the PICOT framework prior to a literature review to assist in finding relevant articles for nursing inquiry.

4. Examines ethics in nursing research.

5. Discusses confidentiality, privacy, and security in informatics.

6. Appraise the Electronic Medical Record and its benefit as a tool in care delivery systems.

7. Compares and contrast quantitative, qualitative, mixed, and outcomes research.

8. Examines different types of statistics used in research.

9. Evaluates own practice to ensure it is evidence-based and outcomes oriented.
10. Defends the need for ongoing nursing research to drive practice change and quality nursing care.
11. Articulates importance of nursing research and evidence based best practices when creating patient plans of care.

### PLO and CLO Alignment Table

<table>
<thead>
<tr>
<th>Program Learning Outcomes</th>
<th>Course Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Exhibit Christian character and servant leadership while providing compassionate care for a diverse population in communities across state, national, and global settings.</td>
<td>N/A</td>
</tr>
</tbody>
</table>
| 2. Evidence-based best practices, critical thinking, and clinical reasoning, inform clinical judgement for the provision of patient-centered, safe, quality care. | 2. Describes the use of informatics and evidence-based practice.  
3. Uses the PICOT framework prior to a literature review to assist in finding relevant articles for nursing inquiry. 
9. Evaluates own practice to ensure it is evidence-based and outcomes oriented. 
10. Defends the need for ongoing nursing research to drive practice change and quality nursing care. 
11. Articulates importance of nursing research and evidence based best practices when creating patient plans of care. |
| 3. Create patient education plans that are culturally specific to the patient and that incorporate the family support system. | N/A                                                                                      |
| 4. Communicate effectively with the interprofessional team to ensure a wholistic approach to patient-centered care. | N/A                                                                                      |
| 5. Continue inquisitive learning by using the Electronic Medical Record and Informatics to meet quality metrics in a variety of healthcare and geographic settings. | 6. Appraise the Electronic Medical Record and its benefit as a tool in care delivery systems. 
11. Articulates importance of nursing research and evidence based best practices when creating patient plans of care. |
| 6. Advocate for healthcare policies for the underserved, vulnerable populations to ensure equity with access to care for prevention, remedial, supportive, and rehabilitative nursing care regionally, nationally, and globally. | 11. Articulates importance of nursing research and evidence based best practices when creating patient plans of care. |
Required Textbooks

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Publisher</th>
<th>ISBN#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding Nursing Research: Building an Evidence-based Practice (7th ed.)</td>
<td>Susan K. Grove and Jennifer R. Gray</td>
<td>Elsevier</td>
<td>978-0323532051</td>
</tr>
<tr>
<td>Applied Clinical Informatics for Nurses (2nd ed.)</td>
<td>Susan Alexander, Karen H. Frith, and Haley Hoy</td>
<td>Jones and Bartlett Learning</td>
<td>9781284129175</td>
</tr>
</tbody>
</table>

**Nursing Diagnosis textbook of your choice (can be a bundled application on smart phone)**

**Nursing Drug textbook of your choice (can be a bundled application on smart phone)**

Publication Manual of the American Psychological Association (7th ed.)

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Publisher</th>
<th>ISBN#</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>American Psychological Association</td>
<td>American Psychological Association</td>
<td>978-143383216</td>
</tr>
</tbody>
</table>

Suggested Resources
1. Articles
2. Position Papers
3. Healthcare Policies
4. Westmont College Library and online databases (EBSCO, ProQuest, ERIC, CINALH)

Assessment of CLOs (Assignments, quizzes, exams)
The assessments used in this course to measure your learning and meeting the content objectives and course learning outcomes will include class participation, quizzes, exams using NCLEX style questions, and a signature assessment (comprehensive assessment).

<table>
<thead>
<tr>
<th>Course Learning Outcomes</th>
<th>Instructional activity</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Discusses the importance of the literature review when beginning a research project or as a way to collect information to support scholarly writing.</td>
<td>Lecture, class discussion, shared experiences, research critiques</td>
<td>Quizzes, homework assignments,</td>
</tr>
<tr>
<td>2. Describes the use of informatics and evidence-based practice.</td>
<td>*PICOT Question</td>
<td></td>
</tr>
<tr>
<td>3. Uses the PICOT framework prior to a literature review or finding relevant articles for class projects.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Examines ethics in nursing research.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Discusses confidentiality, privacy, and security in informatics.
6. Appraise the Electronic Medical Record and its benefit as a tool in care delivery systems.
7. Compares and contrast quantitative, qualitative, mixed, and outcomes research.
8. Examines different types of statistics used in research.
9. Evaluates own practice to ensure it is evidence-based and outcomes oriented.
10. Defends the need for ongoing nursing research to drive practice change and quality nursing care.
11. Articulates importance of nursing research and evidence based best practices when creating patient plans of care.

*Literature Review
*Quantitative research critique
*Qualitative research critique
*Detailed Quantitative Critical Appraisal

Class participation = P/NC
Quizzes = 80 pts
Homework assignments = 20 pts
*Literature Review = 100 pts
*Quantitative research critique = 50 pts
*Qualitative research critique = 50 pts
*Detailed Quantitative Critical Appraisal = 200 pts
Total = 500 pts

- *Fulfills Westmont’s General Education requirement for a Writing Intensive Course within the Major.
- Student must pass course with 75% to progress.

II. Course Policies
Grading
Grade points per unit of credit are assigned on the following scale:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percentage</th>
<th>Grade Points Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100 % to 94.0%</td>
<td>4</td>
</tr>
<tr>
<td>A-</td>
<td>&lt; 94.0 % to 90.0%</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>&lt; 90.0 % to 87.0%</td>
<td>3.3</td>
</tr>
<tr>
<td>Grade</td>
<td>Percentage Range</td>
<td>Grade Points</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>B</td>
<td>&lt; 87.0% to 84.0%</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>&lt; 84.0% to 80.0%</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>&lt; 80.0% to 77.0%</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>&lt; 77.0% to 74.0%</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>&lt; 74.0% to 70.0%</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>&lt; 70.0% to 67.0%</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>&lt; 67.0% to 64.0%</td>
<td>1.0</td>
</tr>
<tr>
<td>D-</td>
<td>&lt; 64.0% to 61.0%</td>
<td>0.7</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 61.0% to 0.0%</td>
<td>0</td>
</tr>
</tbody>
</table>

- **P (At least D-)**: No grade points assigned. Not computed in the grade point average.
- **F**: 0 grade points
- **NC (F)**: No grade points assigned. Not computed in the grade point average.
- **W**: No grade points assigned. Not computed in grade point average.
- **WF**: No grade points assigned. Not computed in grade point average.
- **WP**: No grade points assigned. Not computed in grade point average.
- **WX**: No grade points assigned. Not computed in grade point average.

Westmont does not compute the units and grades students earned at other colleges in its grade average. (Exception: Courses and grades taken as part of a Westmont off-campus program are posted on the Westmont transcript and will be calculated in the Westmont GPA.)

Apart from the exceptions identified below, all courses at Westmont are graded using a letter scale (A, B, C, D, F).

**Instructor Initiated Exceptions:**
1. For pedagogical reasons, an instructor may elect to use P/NC grade reporting in any class not approved for GE credit. It is assumed that the same grade-reporting system will be applied to the entire class.
2. With the approval of the General Education Committee, P/NC grade reporting may be used in appropriate, GE-approved courses.
3. When P/NC grade reporting is used, the syllabus must reflect this fact. In addition, departments are encouraged to include a notice in the catalog that the course may use P/NC grading.

**Attendance Policy**

**Purpose:**
Attendance at regular class meetings is an important manifestation of the commitment to the nursing program. Because this is an accelerated program missing one day could
be detrimental to a student’s success. The following attendance policies are intended to encourage attendance while recognizing special circumstances and the rights of students and faculty.

**Procedure:**
When attendance is not possible, for whatever reason, students are responsible for the missed course work and activities and should consult this faculty member as to whether and how the work might be made up. Due to the nature of this course, it is vital that the student attend class. The student shall be allowed without penalty (beyond the possible loss of credit for missed or late work) one absence from course.

When a student persistently neglects class assignments or has excessive absences, the faculty member may request that the student withdraw from the class or may notify the student that he or she has been terminated with a grade of F in that particular class. A student may not be dropped from a course for missing classes unless the number of UNEXCUSED absences equals or exceeds TWICE the number of times the class meets per week (e.g., **TWO absences in a weekly class**). Through the 12th week of the semester, the faculty member may assign a grade of W instead of an F.

In order to drop a student from a class, the faculty member must send a request to the Registrar. The request must include the rationale for why the student should be dropped from the class and evidence of at least 2 attempts to contact the student and note areas of concern regarding the student’s level of engagement with the course. The Registrar may refer some requests to the Academic Senate Review Committee for action. If approved, the student will be removed from the class.

**Office of Disability Services**
Students who have been diagnosed with a disability are strongly encouraged to contact the Office of Disability Services as early as possible to discuss appropriate accommodations for this course. Formal accommodations will only be granted for students whose disabilities have been verified by the Office of Disability Services. These accommodations may be necessary to ensure your equal access to this course.

Please contact Sheri Noble, Director of Disability Services. (310A Voskuyl Library, 565-6186, snoble@westmont.edu) or visit the website for more information: [http://www.westmont.edu/_offices/disability](http://www.westmont.edu/_offices/disability)

**Dress Code**
Comfortable, non-binding clothing

**Academic Integrity**
When students join our college community, they are expected, as apprentice scholars, to search for truth with integrity and accuracy. This quest requires humility about our abilities, respect for the ideas of others, and originality in our thinking. Since Westmont is a Christian community, the integrity of our scholarship is rooted in the integrity of our faith. We seek to be followers of Christ in the classroom, in the library, and at the
privacy of our computers. Violations of academic integrity are a serious breach of trust within the Westmont community because they violate the regard for truth essential to genuine learning and Christian consistency. Such deception also hurts those students who do their work with integrity. Violations of Academic Integrity may consist of cheating (the use of unauthorized sources of information on an examination or other assignment), falsification (misrepresentation of facts in any academic project or obligation) or plagiarism (the use of someone else’s words or ideas without giving proper credit). Faculty and students should operate in an environment of mutual trust and respect. Faculty will expect students to act in ways consistent with academic integrity. However, for both scholarly and spiritual reasons, cheating, falsification, plagiarism and all other violations of academic integrity will not be tolerated in the Westmont community. Please familiarize yourself with the entire Westmont College Academic Integrity Policy. This document defines different violations of academic integrity and their consequences. It also contains very helpful information on strategies to recognize violations of academic integrity before they occur. Dishonesty in the clinical setting, will not be tolerated and students will be removed followed by program suspension or termination.

Technology in the Classroom
Laptops, tablets, and smart phones can be used in the classroom with the permission of the faculty. The use of smart phones in the clinical setting will depend on each clinical setting’s rules. Smart phones in the clinical setting can be used for clinical related resources (drug book, Tabers, calculation, etc). Recording lectures is also at the discretion of the faulty and permission must be granted.

Emergencies
In the event that an emergency occurs during instruction, it is important to be familiar with the practices in place for the classroom. Please review the document at https://integready.app.box.com/AnticipatingInClass and direct any questions or concerns to the Office of Institutional Resilience.
### III. Weekly course schedule

**Textbooks**
Grove-Understanding Nursing Research
Alexander-Applied Clinical Informatics for Nurses

*Subject to change at any time, you will be notified of any changes*

<table>
<thead>
<tr>
<th>Week</th>
<th>Content Objectives (Reading)</th>
<th>Activities and assignment(s)</th>
<th>Outcome Measurement</th>
</tr>
</thead>
</table>
| 1 May 12 | **Alexander – Chapter 10**  
1. Describe the manner in which Information Technology can be deployed in order to improve patient safety.  
2. Define and describe the electronic health record and its common features.  
3. Review the benefits of EHR use in daily practice.  
4. Review the challenges of HER  
**Alexander – Chapter 11**
5. Understand how clinical decision-support systems (CDSS) can improve patient safety.  
6. Examine informatics tools used in the surveillance and management of acute and chronic diseases.  
7. Discuss methods to apply informatics tools to improve public health.  
**Alexander – Chapter 12**
8. Understand how clinical decision-support systems (CDSS) can improve patient safety.  
**Alexander – Chapter 15**
9. Discussed challenges and issues related to the use of the Internet in patient engagement and empowerment. | Lecture, Discussion, homework | Quiz |
| 2 May 19 | **Grove – Chapter 1**  
1. Define research, nursing research, and evidence-based practice.  
2. Describe the purposes of research in implementing an evidence-based nursing practice.  
3. Discuss the purposes of research for implementing an Evidence-based nursing practice.  
4. Describe the following strategies for synthesizing healthcare research: systematic review, meta-analysis, meta-synthesis, and mixed-methods systematic review.  
5. Examine the levels of research evidence available to nurses for practice.  
6. Discuss your role in research as a professional nurse.  
**Alexander – Chapter 1**
7. Define Clinical Informatics and Nursing Informatics p.7  
8. Discuss the culture of health care in the United States pp.8-10  
9. Discuss the benefits and challenges of clinical informatics  
**Alexander – Chapter 3**
10. Discuss methods of integrating EBP.  
11. Apply knowledge of EBP to patient care.  
12. Discuss best practice approaches to integrate EBP in clinical decision-support systems. | Lecture, Discussion, homework | PICOT Question, homework, quiz |
### 3 May 26
1. Describe the benefits and challenges related to evidence-based practice in nursing.
2. Use the PICO format to formulate clinical questions to identify evidence for use in practice.
3. Implement research-based protocols, algorithms, guidelines, and policies in your practice.
4. Describe the models used to promote evidence-based practice in nursing.
5. Describe process to implement national evidence-based guidelines in your practice.
6. Describe the significance of evidence-based practice centers and translational research in developing evidence-based health care. (Grove - Chapter 13)

### 4,5 June 2
1. Discuss the purposes of the literature review in quantitative and qualitative research.
2. Conduct a computerized search of the literature.
3. Process the literature.
4. Write a literature review to promote the use of evidence-based knowledge in nursing practice from a synthesis of critically appraised literature. (Grove - Chapter 6)

### 6 June 9
1. Define Quantitative Research
2. Identify the types of quantitative research - descriptive, correlational, quasi-experimental, and experimental.
3. Define terms relevant to quantitative research.
4. Identify the steps of the quantitative research process.
5. Read quantitative research reports.
6. Conduct initial critical appraisal of quantitative research report. pp.52-58 (Grove - Chapter 2)

### 7 June 16
1. Define Qualitative Research
2. Describe four qualitative research designs—phenomenological research, grounded theory research, ethnography, and exploratory-descriptive qualitative research—and their intended outcomes.
3. Identify differences in sampling, recruitment, data collection, and data analysis for quantitative and qualitative research.
4. Describe strategies used by qualitative researchers to increase the credibility and transferability of their findings.
5. Conduct initial critical appraisal of qualitative research report. pp.34 (Grove - Chapter 3)

### 8 June 23
1. Identify the historical events influencing the development of ethical codes and regulations for nursing and biomedical research.
2. Describe the ethical principles and human rights that require protection in research.
3. Identify the essential elements of the informed consent process in research.
4. Understand the role of the Institutional Review Board (IRB) and the levels of review.
5. Describe the current issues in ethical research surrounding genomics research, use of animals in studies, and research misconduct. (Grove - Chapter 4)
6. Identify the key components of laws governing the privacy and security of patient health information, contrasting ethical and legal requirements.
7. Review the requirements of laws governing protection of personal health information. (up to p.90) (Alexander – Chapter 6)
<table>
<thead>
<tr>
<th>Date</th>
<th>Topics</th>
<th>Lecture, discussion, in-class work</th>
<th>Quizzes, homework, Critical Appraisal</th>
</tr>
</thead>
</table>
| June 30    | 1. Discuss the importance of conducting critical appraisals of research studies. Grove - Chapter 5  
             2. Define research problems and purposes. Grove - Chapter 5  
             3. Identify research topics, problems, and purposes in published quantitative and qualitative studies. Grove - Chapter 5  
             4. “Critically appraise the research problems and purposes in studies.” Grove - Chapter 5  
             5. Examine research objectives, questions, and hypotheses in research reports. Grove - Chapter 5  
             6. Differentiate among the types of hypotheses (associative versus causal, simple versus complex, nondirectional versus directional, and statistical versus research). Grove - Chapter 5  
             7. “Critically appraise the quality of objectives, questions, and hypotheses in studies.” Grove - Chapter 5  
             8. Differentiate the types of variables included in research reports. Grove - Chapter 5 | commented [CV10]: Objective |                                      |
| July 7     | 9. “Critically appraise the literature review section of a published study for current, quality sources, relevant content, and synthesis of relevant content.” Grove - Chapter 6  
             10. Define theory and the elements of theory (concepts, relational statements, and propositions). Grove - Chapter 6  
             11. Describe the purpose of a research framework. Grove - Chapter 6  
             12. Identify research frameworks developed from nursing and other theories. Grove - Chapter 6  
             13. “Critically appraise the frameworks in published studies.” Grove - Chapter 6  
             14. Describe the concepts relevant to quantitative research designs. Grove - Chapter 8  
             15. Identify the noninterventional or nonexperimental designs (descriptive and correlational) and intervention or experimental designs (quasi-experimental and experimental) commonly used in quantitative nursing studies. Grove - Chapter 8  
             16. Understand concepts relevant to quantitative research designs. Grove - Chapter 8  
             17. Examine the design validity of quantitative (Descriptive, correlational, quasi-experimental, experimental) studies. Grove - Chapter 8  
             18. “Critically appraise the descriptive and correlational designs in studies.” Grove - Chapter 8  
             19. “Critically appraise the quasi-experimental and experimental designs in studies.” Grove - Chapter 8  
             20. Describe sampling theory with its relevant concepts. Grove - Chapter 9  
             21. “Critically appraise the sampling criteria in published studies.” Grove - Chapter 9  
             22. Identify the specific type(s) of probability and nonprobability sampling methods implemented in quantitative studies. Grove - Chapter 9  
             23. “Critically appraise the sample size of quantitative studies.” Grove - Chapter 9  
             24. “Critically appraise the sampling processes implemented in quantitative studies.” Grove - Chapter 9  
             25. “Critically appraise the settings used for quantitative and qualitative studies.” Grove - Chapter 9 | commented [CV11]: Objective | commented [CV12]: Objective | commented [CV13]: Objective |
| July 14    |                                                                                             | commented [CV14]: Objective | commented [CV15]: Objective | commented [CV16]: Objective |
| July 21    |                                                                                             | commented [CV17]: Objective | commented [CV18]: Objective | commented [CV19]: Objective |
26. Describe measurement theory and its relevant concepts of directness of measurement, levels of measurement, measurement error, reliability, and validity.

27. "Critically appraise the reliability and validity of measurement methods in studies.


29. "Critically appraise the sensitivity, specificity, negative predictive value, and likelihood ratios of diagnostic tests implemented in research and clinical practice.

30. "Critically appraise the measurement strategies—physiological measures, observations, interviews, questionnaires, and scales—used in quantitative studies.

31. Describe the data collection process.

32. "Critically appraise the quality of the data collection section in quantitative studies.

33. Understand theories and concepts of the statistical analysis process.

34. Identify the steps of the data analysis process.

35. Identify descriptive analyses, such as frequency distributions, percentages, measures of central tendency, and measures of dispersion, conducted to describe the sample and study variables in research reports.

36. Determine the appropriateness of inferential statistics in studies.

37. Compare and contrast statistical significance and clinical importance of results.

38. "Critically appraise statistical results, findings, limitations, conclusions, generalization of findings, nursing implications, and suggestions for further research a study.

39. "Evaluate the credibility and meaning of the Study Findings.

40. "Conduct a critical appraisal of quantitative research report. pp.338-357"