UNIVERSITY OF COLORADO
College of Nursing
Anschutz Medical Campus

STUDENT GUIDE TO MS COMPREHENSIVE EXAMS

The Comprehensive Exam
The Comprehensive (Comp) Exam (or thesis defense) is the final requirement for graduation from the Graduate School of the University of Colorado (UC) College of Nursing (CON). The purpose of the exam is for the student to demonstrate his/her accomplishment of the terminal outcome competencies of the CON Master’s Program (see last page). A satisfactory Comp Exam is the demonstration of the student’s ability to discuss the integration and application of theory, research methodology, evidence-based practice, and advanced clinical or systems decision-making specific to the student’s specialty option, as well as to engage in a scholarly dialogue with CON faculty regarding issues important to advanced practice nursing.

The primary resources for the policy statements in this document are the CON Student Handbook and the Graduate School Student Handbook. Please see the end of the document or the UC-CON website for links to the complete documents. UC College of Nursing Website

I. Student’s Responsibilities

- Eligibility for Comps:
  - Students are eligible to take the master’s comprehensive exam in their last semester of didactic coursework for the MS degree, if their progress in those courses is satisfactory.
  - Students must be registered for a minimum of one credit hour in one of the following:
    - coursework at the UC College of Nursing;
    - thesis work;
    - or as a “Candidate for Degree” (NURS6940) in the semester in which the comprehensive examination is scheduled.

- Obtain the current GRADUATION PACKET from the Graduate School Office at the beginning of the semester for which the comprehensive exam is planned.

- The student is responsible for choosing a chairperson and 2 other members for their comprehensive exam committee (comp committee) according to the Graduate School Rules (see Resources below). This responsibility includes:
  - The chairperson must be from the student’s program option and must have a Regular Graduate Faculty appointment. The chair can assist the student in choosing the other members of the committee. The chair does not need to be the student’s advisor.
  - Two of the committee members, including the chair, must be from the core faculty of the student’s program option and may hold either a Regular or Special Graduate Faculty appointment.
  - It is recommended that the third member of the committee be from outside the program option’s core faculty.

- Scheduling the initial and any subsequent meetings with the chair prior to the date of the comprehensive exam
- Meeting all Graduate School deadlines for graduation and comp exam paperwork. It is strongly suggested that the student schedule their comp date no later than 2 weeks before the deadline or “Last day to submit thesis”. See CON Academic Calendar

- Graduate school rules state for both MS and PhD students that the student must be present; one committee member, excluding the chair, can be on ITV (distance) for the comprehensive exam. This rule does not apply to students matriculated in online-only options.

II. Preparing for the Exam

- An initial meeting between the student and the chair of the comp exam committee is encouraged as early as possible preferably in the semester prior to the comp exam or early in the semester in which the exam is scheduled.
The initial meeting is to provide guidance in the preparation of the comprehensive exam as a demonstration of the MS core outcome competencies.

The student will be prepared with a topic or issue for their comp presentation and discuss the relevance and appropriateness of this topic with the chair.

The comp chair and student will schedule additional meetings as necessary to adequately prepare for the comp exam

- Students will be conversant and knowledgeable in nursing theory and/or borrowed theory (i.e., theory, conceptual frameworks/models) from other disciplines. The theory or conceptual model does not need to come from nursing.
  - At least one primary source written by the theorist should be read in preparation for comps and referenced; this could be a book, chapter, or article.
  - Components and relationships of the theory or theories, including some of the inherent strengths and weaknesses
  - Application to advanced nursing practice.

- Students will be conversant and knowledgeable of the process of research generation, research utilization, and evidence-based practice (EBP). Specific content pertinent to this area may include:
  - Articulating knowledge of the necessary skill sets, such as how to identify questions for knowledge development; forming a PICO question (i.e., patient population, intervention, comparison, outcomes); search appropriate databases for relevant evidence; and how to synthesize the literature.
  - Critically appraise the evidence
  - Knowledge of research methodologies and statistical methods
  - Knowledge of the steps of the research process
  - Interpretation of narrative and quantitative results (e.g., articulation of themes; interpretation of relative risk, odds ratio, confidence intervals, effect sizes, etc.)
  - Application of research findings and relevant evidence in advanced practice
  - Strategies for implementation of research- and evidence-based practice (incl. knowledge of change and organizational theories, barriers and facilitators of EBP)

- Students in clinical options will be able to demonstrate advanced clinical decision-making as demonstrated by one of the following:
  1. Clinical case study including:
     - Pharmacology
     - Pathophysiology
     - Differential diagnoses
     - Comprehensive, evidence-based plan for care
     - AND/OR scholarly discussion of an
   2. Issue of clinical relevance to specialty (i.e., teen pregnancy, health literacy, prevention of injury, quality issues, patient safety, system issues, etc.)
   - AND be able to articulate:
   3. Role knowledge (i.e., components of the Advanced Practice Nurse [APN] role)
   4. Knowledge of APN and specialty scope of practice, skills, and professional performance competencies.

- Students in systems options will be able to demonstrate advanced systems decision-making as demonstrated by one of the following:
  1. Systems case study
  2. Issue of relevance to specialty (quality issues, informatics, patient safety, leadership/administration) AND be able to articulate:
  3. Role knowledge
  4. Knowledge of APN and specialty scope of practice, skills, and professional performance competencies.

- Students should be prepared to respond to any question relevant to their presentation, their specialty knowledge, and the terminal MS program outcome competencies.

- A second meeting with the comp chair is recommended approximately 2 weeks before the scheduled comp date. The presentation will be reviewed by the chair at this time. This second meeting is strongly encouraged to evaluate the student's readiness for the exam.
If the student does not appear to be adequately prepared, it is the responsibility of the chair to delay the exam until the student is more likely to achieve success.

III. Comp Format

- All Master’s students will demonstrate their mastery of graduate nursing education through a comprehensive exam. The comp exam or thesis defense is limited to two hours.
  - The student will be expected to be able to engage in a scholarly dialogue with the committee members. Potential questions from the committee will be related to the integration and application of theory, research methodologies, evidence-based practice, and advanced clinical/systems decision-making, knowledge from all graduate courses completed, and the MS Program Outcome Competencies.
  - The comp chair may modify any of the format guidelines, at his/her discretion; the student should be informed of any changes during the preparatory meetings with the comp chair.

**Comp Exam Format:** Students can demonstrate their integration of the competencies through a PowerPoint case study/problem presentation. It is strongly suggested that preparation for the Comp Exam should follow the suggestions outlined in section II.

- **PowerPoint format involving a case study or specific health problem**
  - PowerPoint slides will be prepared based on the guidance of the comp chair during preparatory meetings.
  - For students in clinical options the following format is suggested:
    1. Choose a patient scenario or topic that clearly demonstrates a need for a comprehensive literature review and evaluation of the literature.
    2. Form a PICO question.
    3. Describe in detail the significance of the problem
      - Incorporate pertinent physiology/pathophysiology, pharmacology, physical assessment as appropriate
    4. The student may be asked questions from any of the MS course credits taken during their program of study
    5. Theoretical or conceptual model should be applicable the clinical scenario or topic of interest
      - Know tenets of model
      - Thoroughly analyze the model or theory and delineate limits and generalizability and applicability to advanced practice
      - MUST have read at least 1 original article by the author of the theory/conceptual model
    6. Evidence-based practice
      - Present a review of extant research that elucidates the topic and provides the evidence to guide practice
      - Defend databases selected: Cochrane, CINHAL etc
      - Perform a thorough review of literature
      - Articulate level of evidence
    7. Application to practice
      - Should practice related to the topic remain the same or be changed based on the evidence?
      - Incorporate the advanced practice role into the discussion
  - **For students in systems option:**
    1. Comprehensive literature review and evaluation of the literature
    2. Must articulate the evidence to support the case scenario using evidence-based practice techniques OR generate a research question to address specific to the case study
    3. Describe in detail the significance of the problem
    4. Include a theoretical or conceptual model appropriate to the topic of interest
      - Know tenets of model
      - Limits and generalizability
      - MUST have read at least 1 original article by the author of the theory/conceptual model
    5. Evidence-based practice
o Present a review of extant research that elucidates the topic and provides the evidence to guide practice
o Defend databases selected: Cochrane, CINHAL etc
o Perform a thorough review of literature
o Articulate level of evidence

6. Application to practice
   o Should practice related to the topic remain the same or be changed, based on the evidence?
   o Incorporate the advanced practice role into the discussion.

- The exam will begin at the designated time and proceed according to the Graduate School rules. Students should allow time prior to the start of the exam to acquire and set up equipment, if used.
- PowerPoint presentation
  1. **No more than 15 slides are allowed** in the presentation (excluding the title slide and reference slides), using no smaller than a 24-point Times New Roman or similar font. The number of content slides may be modified slightly with approval of the chair.
  2. Students are strongly encouraged to keep the presentation simple. Bullet points for key items to be covered are suggested. Long slides with many words are strongly discouraged. **Slides should be used to guide or illustrate and should not be read.**
  3. Student’s success on the examination is not related to the aesthetics of the PowerPoint presentation (e.g., colors, animation, etc.).
  4. No PowerPoint notes are allowed for the speaker’s reference.
  5. No reference materials or notes of any kind are allowed in the exam room during the actual exam.
- Students may present with or without a projector
  1. If student chooses to use a projector, s/he is responsible for providing the equipment. Student may contact Education Support Services (303-724-8129) to make equipment arrangements. S/he may distribute copies of the presentation to the comp members at the beginning of the exam.
  2. If student chooses to present without a data projector, copies of the presentation are to be distributed to the committee members at the time of the exam.

**IV. Evaluation of the Student's Success**
 o When the comprehensive exam is completed, the committee members will ask the student to leave the room and evaluate the success of the candidate’s exam. The majority of the committee must agree on the outcome. Success is evaluated based on three possible outcomes:
  o **Pass**
    - The student successfully demonstrates the integration and application of theory, research methodologies, evidence-based practice, and advanced clinical decision-making.
    - The student engages in scholarly dialogue, cites relevant and current evidence to support his/her position, and demonstrates good critical thinking skills (i.e., uses standards of critical thinking: is clear, accurate, precise, relevant, and logical).
  o **Pass, with stated conditions**
    - The student partially demonstrates the integration and application of theory, research methodologies, evidence-based practice, and advanced clinical decision-making.
    - The student’s ability to adequately engage in scholarly dialogue is inconsistent, may not cite relevant or current evidence to support positions, and/or inconsistently demonstrates standards of critical thinking (is not clear, not accurate, not precise, not relevant, and/or not logical).
Student Guidelines MS Comp Exam

- At least one major area (i.e., research, practice, theory) meets the criteria for passing as noted under Pass.
- The comp committee will generate the conditions and present those to the student.
  1. The student has four months (or one academic term) to satisfy the conditions identified by the comp committee. Failure to satisfy these conditions within the four-month timeframe will result in failure of the examination. The CON may then recommend immediate dismissal from the program or allow the student to retake the exam. The decision to allow a retake is solely at the discretion of the program director.

  o Fail
  - The student is not able to demonstrate the integration and application of theory, research methodologies, evidence-based practice, and advanced clinical decision-making in more than one major area (i.e., research, practice, theory).
  - The student is unable to engage in scholarly dialogue, does not cite relevant or current evidence to support positions, and/or does not demonstrate standards of critical thinking (is not clear, not accurate, not precise, not relevant, and/or not logical).
  - “A student who fails the examination is subject to immediate dismissal from the program on the recommendation of the graduate program and concurrence of the Dean. At the program’s discretion, a student who fails the examination may retake it once. The reexamination must be completed by the end of the next academic term. The original examination form noting the failure is signed by the committee and returned to the Graduate School office. New examination forms will be generated when the examination is rescheduled. [Students] will be required to meet registration requirements and be registered during the term in which the repeated exam is taken” (Graduate School Rules, Section 10, accessed 5/24/10; emphasis added).

Resources for Students:
Graduate School Rules and Student Handbook

CON Student Handbook
Master's Program Outcome Competencies
Approved by CON faculty on 2/27/06

1) Implement ethical, competent nursing practice with individuals, families and communities based on
2) Understanding the human experiences of health, illness, healing, and dying.
   • Implement the advanced practice role with a specific population or specialized focus based on
     advanced scientific knowledge.
   • Provide advanced specialty nursing care, respecting client choice and appreciating the subjective
     experiences of health, illness, healing, and dying.
3) Use technology and information systems to promote health, facilitate appropriate and ethical
   decision-making, support collaboration, and foster communication.
   • Integrate technology and information systems within an advanced practice role with a specific
     population or a specialized focus.
   • Provide leadership in the use of technology and information systems in the promotion of optimal
     health for a specific population.
   • Critique and analyze the ethical implications of advanced technologies.
4) Promote health and safe environments of local to global populations and communities through the
   development, implementation, and evaluation of models, programs, and policies.
   • Assess existing health and social policies for specific populations to promote awareness of the
     relationships between social-political-physical environments and health.
   • Advocate for vulnerable populations and, through collaboration, mobilize necessary changes in
     existing policies to promote the health and wellness of specific populations.
5) Manage care ethically with individuals, families, and populations to achieve quality, cost-effective
   outcomes.
   • Assume a leadership role in managing care for specific populations while maintaining sensitivity
     to potential ethical/legal dilemmas.
   • Manage quality and cost-effective outcomes related to advanced practice with specific population
     or specialized focus.
   • Direct the care/case management across the continuum for a specific population.
6) Advocate for social justice initiatives that enhance access, quality, and socio-cultural acceptability of
   health care for all.
   • Provide leadership for social justice initiatives for vulnerable and under-served populations.
   • Design programs for and with specific populations to promote access to culturally competent,
     quality care.
7) Provide leadership in the delivery and management of health care for diverse populations and
   environments across the continuum of care.
   • Design, deliver, and manage health care of specific populations incorporating a multicultural
     perspective.
   • Model culturally competent care to other health care providers.
   • Institute changes in health care systems that facilitate meeting the needs of diverse populations.
8) Practice relationship-centered caring based on the human experience of health/illness/healing/dying.
   • Demonstrate relationship-centered caring in advanced practice nursing through advocating for
     client dignity, uniqueness, and choice.
   • Integrate practices that model effective caring and the value of relationships into advanced
     practice.
9) Practice nursing reflectively, guided by theory, based on best evidence.
   • Practice in an advanced role with an explicit philosophic and theoretic framework, using midrange
     theories and sources of evidence to inform decisions.
   • Generate innovative solutions to existing and emerging dilemmas in advanced practice with
     specific populations.
10) Participate in generating and testing knowledge regarding nursing science, nursing practice, and
    health care delivery.
    • Identify questions appropriate for knowledge development in nursing.
    • Collaborate with others in all phases of the research process to generate nursing knowledge and
      inform nursing practice.
    • Evaluate nursing research critically to inform advanced practice.
11) Engage in professional stewardship to improve interdisciplinary collaboration and nursing practice, education, research, and health care delivery.

- Obtain appropriate national certification in advanced practice specialty area and maintain certification throughout one's career.
- Assume leadership in practice settings and professional organizations to foster improvements in advanced nursing practice, nursing education, client care, and the health care delivery system.
- Share relevant knowledge related to advanced practice specialty with clients, nurses and other health care professionals.