8. **One lecture course in the Responsible (Ethical) Conduct of Research** (1-2 credits) selected from the following list of seven courses, or an equivalent course approved by the Executive Committee:
   a) **Med Hist 545 Ethical and Regulatory Issues in Clinical Investigation** (1 credit) Focuses on human subjects issues. **Note:** Does not address all NIH-recommended topics.
   b) **Pharmacy 800 Research Ethics, Scientific Integrity and the Responsible Conduct of Research** (2 credits, alternate Falls, 2020, 2022, etc.)
   c) **Vet Med/Surgical Science 812 Research Ethics and Career Development** (2 credits)
   d) **Ob/Gyn 955 Responsible Conduct of Research for Biomedical Students** (2 credits)
   e) **Ob/Gyn 956 Advanced Conduct of Research for Biomedical Graduate Students** (1 credit) Note: Only for investigators with independent funding
   f) **Nursing 802 Ethics and Responsible Conduct of Research** (1 credit)
   g) **Oncology 715 Appropriate Conduct of Science** (1 credit) Note: Appropriate for microbiology-oriented research

9. **A non-credit regulatory experience activity:** Students attend Pharmacy 800, Research Ethics Scientific Integrity and the Responsible Conduct of Research (alternate Falls 2020, 2022, etc.), sign a confidentiality agreement, review a protocol submitted to an Institutional Review Board, and attend an IRB meeting (supervised). This nationally innovative training activity is also known as the RCR Laboratory.

10. **Advanced statistics or analytical methods courses (6 credits):** Students should select courses that advance their knowledge and application of statistics, study design or analytical methods (such as those used in qualitative and quantitative studies) that are applicable to their areas of research. Students are encouraged to consult the Program Administrator about their options, such as; Sociology 751 Methods of Survey Research Design & Measurement; Sociology 360 / 361 Stats for Sociologists I / II

11. **Biostatistics and Medical Informatics 773 Clinical Research Informatics** (3 credits)

12. **Communication Sciences & Disorders 900 Research Career Development Seminar on Grant Writing** (3 credits)

13. **PhD Interdisciplinary or Minor Option.** Clinical Investigation students are exempted from the Minor requirement based on the following principles. The mission of the Graduate Program in Clinical Investigation is to train students to develop new technologies and therapeutic interventions using efficient and effective clinical trials to accelerate bringing clinical research discoveries to communities in the State and throughout the Country. Through an infrastructure of team research experience and diversified coursework, the program provides clinician scientists exposure to, and training from, faculty from a wide variety of scientific disciplines (e.g. biostatistics and medical informatics, biomedical engineering, oncology, and nursing, pharmacy, and veterinary sciences) to prepare them to direct patient-oriented research teams, comprised of scientists from inside and outside their own scientific disciplines. Thus, the doctoral program in Clinical Investigation is inherently interdisciplinary.

14. At the time students request the Preliminary Exam Warrant, they are required to provide the program office with a **two-paragraph summary** of their interdisciplinary coursework experience and on the heterogeneous and diverse research teams with which they have interacted and from which they received instruction. Alternatively, students may wish to complete a PhD Minor and submit a Completion of Minor form at the time they request the Preliminary Exam Warrant.

   Students who achieve breadth of training by completing a PhD Minor should be aware that a Minor requires at least 10 credits unique to the Clinical Investigation program; that is, credits taken for the major will not also count for the Minor. Monitoring the course content and credit requirements for PhD Minors is the responsibility of the Minor department/program. Major departments/programs are responsible for indicating which type of minor is being pursued (External or Distributed) at the time of the preliminary warrant request.

**External or Distributed Minor Option**
- Option A (external) requires a minimum of 10 credits in a single department/program. Selection of this option requires the approval of the minor department/program.
- Option B (distributed) requires a minimum of 10 credits in one or more departments/programs and can include course work in the major