<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Terms Offered</th>
<th>Delivery Mode</th>
<th>Semester (taken or planned)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing 7781</td>
<td>Responsible Conduct of Research Biomedical Research Ethics</td>
<td>3</td>
<td>SP</td>
<td>Online</td>
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<tr>
<td>Bioethics 6010</td>
<td>Research Ethics</td>
<td>3</td>
<td>AU,SP</td>
<td>Online</td>
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<tr>
<td>Pharmacy 8520</td>
<td>Research Ethics</td>
<td>1</td>
<td>SU</td>
<td>In-Person</td>
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<tr>
<td>BIOPHRM 7510</td>
<td>Professional &amp; Ethical Issues in Biomedical Science</td>
<td>2</td>
<td>SP</td>
<td>In-Person</td>
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<tr>
<td>Vision Sc. 7960</td>
<td>Ethics in Biomedical Research</td>
<td>2</td>
<td>AU,SP</td>
<td>In-Person</td>
<td></td>
</tr>
</tbody>
</table>

**Additional Required Courses – select Option 1 or Option 2 (9 credits)**

**o Option 1: Clinical Research Administration Focus** – *Students must take the following three courses*

- Nursing/Pharmacy 7770: Fundamentals of Medical Product Development and Regulation (3 credits, AU, SU Online)
- Nursing/Pharmacy 7782: Research Design and Methods for Clinical Research (3 credits, AU Online)
- Nursing/Pharmacy 7405: Management of Clinical Studies (3 credits, SP Online)

  *(prereq.: NURS/PHR 7770)*

**o Option 2: Translational Pharmacology Focus** – *Students must take the following two courses plus one elective*

- BIOPHRM/Nursing/Pharmacy 7560: Clinical Trials I: Design and Regulation (3 credits, AU Online)
- BIOPHRM/Nursing/Pharmacy 7561: Clinical Trials II: Management and Leadership (3 credits, SP Online)

**Option 2 electives – select one:**

- BIOPHRM 5600: Intro. To General Pharmacology Fundamentals of Pharmacology (3 credits, AU, SP, SU Online)
- Pharmacy 5010: Fundamentals of Pharmacology (3 credits, SU Online)
- Pharmacy 7562: Design & Management of Preclinical Studies (3 credits, AU Online)
- Pharmacy 7784: Data Analysis and Interpretation for Clinical and Preclinical Research (3 credits, AU Online)
- PUBHBIO 6210: Applied Biostatistics I (3 credits, AU, SP, SU Online & In-Person)
- PUBHBIO 6211: Applied Biostatistics II (3 credits, SU, SP Online & In-Person)
- MCR 7404: Project Management for Healthcare and Clinical Research (3 credits, SU Online)
- MCR 7481: Data Management and Informatics in Clinical Research (3 credits, SP Online)
- MCR 7482: Regulatory Strategy, Writing, and Leadership (3 credits, SU Online)
- MCR 7402/ Pharmacy 5402: Econ. Eval. of Healthcare Intervention (3 credits, AU, SP Online)
- Pharmacy 7460: Regulatory Strategy, Writing, and Leadership (3 credits, SU Online)
- Pharmacy 7570: Pharmaceutical Safety & Risk Management (3 credits, AU Online)
- Pharmacy 7572: Global Regulation of Medical Products (3 credits, SP Online)
- Pharm/CBG 5700: Intro. To Personalized Therapeutics and Pharmacogenomics (3 credits, SP Online)
- Pharmacy 7580: Principles of Safety Pharmacology (3 credits, SP Online)
- Pharmacy 7582: Organ System Toxicology (3 credits, AU, SP Online)
- Pharmacy 7584: Applied Pharmacokinetics and Pharmacodynamics (3 credits, SP Online)
- Pharmacy 7586: Integrative in Vivo Modeling for Drug Development (3 credits, SU Online)
- Pharmacy 7595: Scientific Writing: Clinical Trial Protocol and Manuscript Development (3 credits, SP Online)