DOCTORAL DEGREE REQUIREMENTS

General policies for all University of Oklahoma doctoral programs are available in the Graduate College Bulletin.

DOCTOR of PHILOSOPHY

MAJOR: Chemistry and Biochemistry
CONCENTRATION: Chemistry
DISCIPLINARY EMPHASIS: Inorganic Chemistry

Program effective Fall 2015

Graduate courses that are a part of Programs of Study in the Department of Chemistry and Biochemistry are denoted as CHEM G5XYZ, where X is the program of study, Y is the sequence of number within that Program of Study (for Y=0-9), and Z is the number of credit hours as follows:

<table>
<thead>
<tr>
<th>X</th>
<th>Departmental Requirements</th>
<th>Y</th>
<th>Introductory Instruction</th>
<th>Z</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Departmental Requirements</td>
<td>0-2</td>
<td>Introductory Instruction</td>
<td>0-4</td>
<td>Credit Hours</td>
</tr>
<tr>
<td>1</td>
<td>Analytical</td>
<td>6</td>
<td>Chemical Education</td>
<td>3-5</td>
<td>Advanced Instruction (modules)</td>
</tr>
<tr>
<td>2</td>
<td>Biochemistry</td>
<td>7</td>
<td>Structural Biology</td>
<td>6-7</td>
<td>Special Topics or Electives</td>
</tr>
<tr>
<td>3</td>
<td>Inorganic</td>
<td>8</td>
<td>Unused</td>
<td>8</td>
<td>Practicum</td>
</tr>
<tr>
<td>4</td>
<td>Organic</td>
<td>9</td>
<td>Interdisciplinary or custom</td>
<td>9</td>
<td>Seminar</td>
</tr>
</tbody>
</table>

COURSEWORK REQUIREMENTS

Department Courses and Seminar Requirements
Continuous enrollment in CHEM 5090 Departmental Colloquium is required (0 credit hours).

- **CHEM 5011** Fundamentals I ........................................................................................................ 1 hour
- **CHEM 5021** Fundamentals II ........................................................................................................ 1 hour
- **CHEM 5080** Laboratory Rotations ................................................................................................ 2 hours
- **CHEM 5391** Seminar in Inorganic Chemistry ............................................................................... 1-12 hours

Continuous enrollment in 5391 is required after the first semester, up to 12 credits.

**Total** ............................................................................................................................................. 5-16 hours

Focus Area/Breadth Course Requirements ......................................................................................... 16+ hours
Minimum of 16 credit hours in letter-graded courses in the CHEM course inventory at the G5XYZ level (X≠0, Y=0-8) including:

**Focus Area Course Requirements**—Up to 3 credits of student advisory committee-approved graduate coursework outside the department may count for focus area credit.

- Minimum 8 hours from:
  - **CHEM 5300** Intermediate Inorganic Chemistry, and/or
  - **CHEM 5330** Advanced Inorganic Chemistry, and/or
  - **CHEM 5360** Frontiers in Inorganic Chemistry ........................................................................... 8+ hours

**Breadth Course Requirement**
- Minimum 4 hours CHEM 5XY0 (X≠0 or 3, Y=0-8) ......................................................................... 4+ hours

Directed Studies/Dissertation Research ............................................................................................. 2+ hours
2 hours minimum CHEM 6980 Research for Doctoral Dissertation.
Up to 9 credits CHEM 5990 Independent Studies. Up to 6 credits CHEM 5960 Directed Readings in Chemistry.

**TOTAL** ............................................................................................................................................. 90 hours