DOCTORAL DEGREE REQUIREMENTS

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

DOCTOR of PHILOSOPHY
D170/R101

MAJOR: Chemistry and Biochemistry

CONCENTRATION: Chemistry

DISCIPLINARY EMPHASIS: Structural Biology
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 GSXYZ, 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:

- X = 0 Departmental Requirements
- 1 Analytical
- 2 Biochemistry
- 3 Inorganic
- 4 Organic
- 5 Physical
- 6 Chemical Education
- 7 Structural Biology
- 8 Unused
- 9 Interdisciplinary or custom

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 5291 Seminar in Biochemistry, or
  CHEM 5791 Seminar in Structural Biology ......................................... 1-12 hours

Continuous enrollment in 5291/5791 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 GSXYZ 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.

- CHEM 5210 Molecular Biology .................................................................. 2+ hours
- Minimum 7 hours from:
  CHEM 5730 Macromolecular Crystallography, and/or
  CHEM 5740 Biological NMR Spectroscopy, and/or
  CHEM 5750 Macromolecular Structure and Function, and/or
  CHEM 5780 Practicum in Structural Biology ............................................. 7+ hours
- Minimum 3 hours CHEM 5XY0 (Y=6 or 7)................................................. 3+ hours

Breadth Course Requirement
- Minimum 4 hours CHEM 5XY0 (X≠0 or 7, 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