# Chemistry (PhD)

## Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH 610</td>
<td>Special Topics In Chemistry (Introduction to Graduate Studies)</td>
<td></td>
<td>63</td>
</tr>
<tr>
<td>CH 801</td>
<td>Seminar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CH 895</td>
<td>Doctoral Dissertation Research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CH 899</td>
<td>Doctoral Dissertation Preparation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Additional Courses

See "Additional Courses" listed below.

**Total Hours**: 81

## Additional Courses

**Select a minimum of six recommended courses below:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH 727</td>
<td>Biological Mass Spectrometry</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>CH 749</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CH 721</td>
<td>Advanced Organic Chemistry I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CH 725</td>
<td>Physical Methods in Organic Chemistry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CH 755</td>
<td>Organic Reaction Mechanisms</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CH 701</td>
<td>Advanced Inorganic Chemistry I: Structure and Bonding</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CH 795</td>
<td>Special Topics in Chemistry</td>
<td>1-6</td>
<td></td>
</tr>
<tr>
<td>CH 721</td>
<td>Advanced Organic Chemistry I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>or CH 725</td>
<td>Physical Methods in Organic Chemistry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>or CH 737</td>
<td>Quantum Chemistry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or CH 795</td>
<td>Special Topics in Chemistry</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Additional courses will be approved in conjunction with the academic committee.

## Faculty

### Full Professors

Felix Nicholas Castellano
Stefan Franzen
Reza Ghiladi
Edith Glazer
Christopher B. Gorman
Elon Ison
Elena Jakubikova
Jonathan S. Lindsey
Lucian Lucia
Paul Maggard
James D. Martin
David C. Muddiman
Alexander A. Nevzorov
Maria T. Oliver-Hoyo
Joshua Pierce
David A. Shultz
Alexej I. Smirnov
Leslie A. Sombers
Brian Space
Gavin John Williams

### Associate Professors

Nelson R. Vinueza Benitez
Wei-Chen Chang
Ryan Chiechi
Vincent Lindsay
Thomas Makris
Caroline Proulx
Tatyana I. Smirnova
Thomas Theis
Yi Xiao

Assistant Professors
Oliver Baars
Yevgeny Brudno
Raja Ghosh
Milena Jovanovic
Xiaotong Li
Jun Ohata

Practice/Research/Teaching Professors
Jeremiah Feducia
Audrey Fikes
Daniel Fowler
David Heidary
Ana Ison
Kirsten Kramer
Naish Lalloo
Cassie Lilly
Marion Martin
Gregory S. McCarty
Lori Petrovich
Ghada Rabah
Kay Sandberg
Laura Sremaniak
Masahiko Taniguchi
Travis Varner
Maxim Voynov

Emeritus Faculty
Alton J. Banks
Robert D. Bereman

Charles Boss
Carl L. Bumgardner
Halbert H. Carmichael
Daniel L. Comins
Forrest W. Getzen
Forrest C. Hentz
Morteza Khaledi
S. Levine
Charles Moreland
Suzanne T. Purrington
William L. Switzer
William P. Tucker
Dennis W. Wertz
Myung H. Whangbo
Jerry L. Whitten

Adjunct Faculty
V. Bornemann