Ph.D. Degree Requirements Worksheet
Agricultural & Environmental Chemistry Graduate Group

Name: ___________________________  Acad. Advisor: ___________________________  Date: ________________

BS School: ___________________________  Major: ___________________________  Date: ________________

MS School: ___________________________  Major: ___________________________  Date: ________________

A. Prerequisites

**Organic Chemistry:** Required to have equivalent of courses CHE 128 A, B, and C

<table>
<thead>
<tr>
<th>School</th>
<th>Course #</th>
<th>Term/Year</th>
<th>Grade</th>
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<tbody>
<tr>
<td></td>
<td>128 A or equiv.</td>
<td></td>
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<tr>
<td></td>
<td>128 B or equiv.</td>
<td></td>
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<td></td>
<td>128 C or equiv.</td>
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**Physical Chemistry:** Required to have equivalent of courses CHE 107 A and 107 B; or CHE 110 A, B, and C

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<th>School</th>
<th>Course #</th>
<th>Term/Year</th>
<th>Grade</th>
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<tbody>
<tr>
<td></td>
<td>107 A/110 A or equiv</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>107 B/110 B or equiv</td>
<td></td>
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<td></td>
<td>110 C or equivalent</td>
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**Inorganic Chemistry or Biochemistry:** Required to have equivalent of course CHE 124 A; or BIS 102 and 103

<table>
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<tr>
<th>School</th>
<th>Course #</th>
<th>Term/Year</th>
<th>Grade</th>
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<tr>
<td></td>
<td>124 A or equiv.</td>
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<tr>
<td>or</td>
<td>BIS 102 or equiv.</td>
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<td></td>
<td>BIS 103 or equiv.</td>
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B. Placement Exams

Required to score above 50% on ACS examinations in physical chemistry and either inorganic or organic chemistry. The General Chemistry exam is required if you would like to qualify for a TA position in the Chemistry Department.

**Physical Chemistry:**

Exam Date: ____________________________________________________________

Exam Date: ____________________________________________________________

Notes: ________________________________________________________________

<table>
<thead>
<tr>
<th>Overall</th>
<th>Percentages</th>
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<tbody>
<tr>
<td>Percentile</td>
<td>110 A</td>
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</table>

**Organic Chemistry:**

Exam Date: ____________________________________________________________

Exam Date: ____________________________________________________________

Notes: ________________________________________________________________

<table>
<thead>
<tr>
<th>Overall</th>
<th>Percentages</th>
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<tbody>
<tr>
<td>Percentile</td>
<td>128 A</td>
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</tbody>
</table>

**Inorganic Chemistry:**

Exam Date: ____________________________________________________________

Exam Date: ____________________________________________________________

Notes: ________________________________________________________________

<table>
<thead>
<tr>
<th>Overall</th>
<th>General Chemistry:</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentile</td>
<td>Exam Date:</td>
<td>Percentile</td>
</tr>
<tr>
<td></td>
<td>Exam Date:</td>
<td>Notes:</td>
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</tbody>
</table>
C. Core Courses (6-8 units)
   C.1. ETX 220 and 220L; or CHE 219 (with 219L strongly recommended); or VEN 223
       Course: ____________ Grade: _______ Qtr/Yr: _______ Units: _______
       Course: ____________ Grade: _______ Qtr/Yr: _______ Units: _______
   C.2. CHE 233 or CHE 226
       Course: ____________ Grade: _______ Qtr/Yr: _______ Units: _______

D. Electives (at least 19 units, of which no more than 7 can be upper division)
   D.1. Statistics
       If no prior undergraduate-level statistics, must take STA 100 or STA 102
       Course: ____________ Grade: _______ Qtr/Yr: _______ Units: _______
       If prior undergrad statistics, take one from STA 106, STA 108, STA 137, STA 205, STA 223, ECS 124, PLS 205, or PLS 206
       Course: ____________ Grade: _______ Qtr/Yr: _______ Units: _______
   D.2. Specialization and Emphasis (at least 3 graduate lecture courses)
       Course #      Course Name      Grade      Quarter      Year      Units
       __________________________________________________________
       __________________________________________________________
       __________________________________________________________
       __________________________________________________________
       __________________________________________________________
       __________________________________________________________
       __________________________________________________________
       __________________________________________________________
       Total Elective Graduate Units (at least 12): _______
       Total Elective Units (at least 19): _______

E. Seminars
   First-year seminar requirements (list quarter and year)
       Meet the Faculty: ____________ Presenting a Seminar/Colloquium: _______
       Journal Club: ____________
   Ag Chem seminar (list quarters and years): ______________________________
       (Seminar is required every registered qtr)

F. TA Requirement (one 3-unit course or equivalent; list course, qtr, year): ______________________________

G. Qualifying Examination
   G.1. Fulfilled requirements for QE (A-E above):
   G.2. QE results
       QE 1: P / NP / F
       QE 2: P / NP / F

H. Completed all course/seminar/TA requirements for PhD

I. Exit Seminar (list qtr and year): ______________________________

v. 04 Nov 2016
A. Prerequisites
   Coursework deficiencies should be made up by the end of the first academic year by earning a "B" or better.

B. Placement Exams
   You are required to take placement exams in physical chemistry and either inorganic or organic chemistry. Exams should be taken before the beginning of your first Fall quarter.
   Record the results of all tests, regardless of score, on the worksheet.
   If you fail a required exam (i.e., score below the 50th percentile), talk with your Academic Adviser. There are two options:
   1. Take the exam again and pass it. Depending on your exam scores, you might want to first take (or audit) one or more of the courses that correspond to the exam material.
   2. Take the course(s) corresponding to the failed exam material. For example, if you fail the Organic exam by scoring at the 40% percentile, with percentages of 60% for the 128 A questions, 49% for the 128 B questions, and 20% for the 128 C material, then you need to take CHE 128 B and 128 C. In some cases it might not be possible to get a breakdown of an exam's results to specific classes. In this case you need to take all of the courses in the sequence. In some cases results might only correspond to part of the required course sequence (e.g., if results are only reported for 128 A and 128 B). In this case, as long as you passed one of the sections you do not need to take the course corresponding to the course with no reported results (but you do need to take the course corresponding to any section you failed).
   If you twice fail the exam for a given subject (e.g., Organic) you must take the course(s) corresponding to the portions you did not pass, as described in (2) above.
   Students who would like to qualify for a TA position in the Chemistry Department must pass the General Chemistry exam.

C. Core Courses
   You must take one course in chemical separations and analysis (ETX 220 and 220L; or CHE 219 (with 219L strongly recommended); or VEN 223
   You must also take a course in chemical reaction mechanisms, either CHE 233 or CHE 226.

D. Electives
   You are required to have at least 19 units of electives; of this number, at least 12 units need to be in graduate coursework.
   In addition to the statistics course requirement, you need to take at least 3 Specialization graduate lecture courses.

E. Seminar
   Every quarter that you are registered you need to satisfactorily complete seminar (AGC 290) when it is offered.
   In the first year you need to take 3 additional seminars: (1) Meet the Faculty (Faculty Research Seminar), (2) Mechanics of Presenting a Seminar, and (3) Journal Club.
   PhD students must present at 3 Winter Colloquia, beginning in the 2nd year.

F. Teaching Experience
   PhD students are required to be a teaching assistant in one 3-unit course or the equivalent.
   Students who would like to qualify to be a TA in Chemistry must pass the General Chemistry Placement Exam.

G. Qualifying Examination
   All required coursework (except for seminars) must be completed before taking the Qualifying Exam.
   The QE should be taken by the 7th quarter, and no later than the 9th quarter, after admission to the PhD program.

H. Completion of course/seminar/TA requirements
   Congratulations! You're almost finished!

I. Exit Seminar
   You are required to give a 50-min exit seminar, preferably (but not necessarily) as part of AGC 290.