REQUIREMENTS FOR TEACHER CERTIFICATION IN CHEMISTRY
(42 3-credit courses PLUS 3 1-credit Phys. Ed. PLUS 4 1-credit field experiences)

Name ___________________________ ___________________ __

CHEMISTRY (B. S.)

1. GENERAL EDUCATION CORE
A. BASIC REQUIREMENTS:
   1. Communication and Thought:
      EN 103
      EN 104
   2. Physical Education Courses:
      PE 100
      Activities (Select two)
B. CULTURAL LITERACY:
   1. Humanities 1 & 2. Select one set:
      (HI 201-202)/(PO 201-202)
      (HI 201-HI 202 recommended)
   2. Humanities 3: Great Works of Art
      (N.B. Must be Art, not Music)
   3. Humanities 4: Great Works of Literature
      (See Undergraduate Catalog - EN, SP, PL, PO, TH, etc.)
C. MODES OF THINKING:
   1. Literature (Select one: EN 110, 112, 115)
   2. Mathematics: (Satisfied by the major – MA121, 122)
   3. Natural Science: (Satisfied by the major)
   4. Philosophy: PL 109
   5. Social Sciences: PS 109 (Required by STEP)

D. CHRISTIAN VALUES AND THEOLOGY
   1. Catholic Theology (TH 109)
   2. Intermediate Theology:
      (Select any 200 or 300 level course)
   3. Values Seminar:

2. MAJOR
   1) CH 101
   2) CH 102
   3) CH 204
   4) CH 231
   5) CH 232
   6) CH 351
   7) CH 361
   8) CH 362
   9) CH 435
   10) CH 455
   11) MA 121
   12) MA 122
   13) PH 201
   14) PH 202

   CH 456 is replaced by Student Teaching Internship

3. EDUCATION:
   1) ED 109 (or ED 301)
   2) ED 209
      10) ED 3802 (1 credit)
   3) ED 218 (or 216)
      11) ED 405
   4) ED 2801 (1 credit)
      12) ED 413 and lab
   5) ED 330
      13) ED 4801 (1 credit)
   6) ED 364
      14) ED 450
   7) ED 366
      15) ED 452
   8) ED 373
      16) ED 454
   9) ED 3801 (1 credit)
      17) ED 456

4. STEP CONTROLLED REQUIREMENTS:
   1) BI 151
   2) CH 105 (1cr)

5. OTHER REQUIREMENTS:
   PPST: Reading (0710)
   Writing (0730)
   Mathematics (0720)
   Chemistry: Content Knowledge (0245)
   SP-164 Criminal Record Check
   CY-113 Child Abuse History Clearance
   FBI Federal Criminal History Check
   Tuberculin (TB) Test

Advisor _________________________________________
STEP Coordinator ______________________________

Dr. J. Rance-Roney, Director STEP
Dr. S. Mattingly, Director of Advising and Retention
Effective fall, 2010
## STEP CERTIFICATION

Typical Program: CHEMISTRY MAJOR, B. S.

### First Year

#### Fall Semester

- Chemical Principles (CH 101)
- Calculus I (MA 121)
- Communication and Thought I (EN 103)
- Introduction to Psychology (PS 109)
- Foreign Language/World Cultures
- Lifetime Fitness and Wellness (PE 100)
- Laboratory Safety (CH 105) * one-credit, offered every other fall

#### Spring Semester

- General Chemistry (CH 102)
- Calculus II (MA 122)
- Communication and Thought II (EN 104)
- The Educative Process (ED 109) or ED 301
- Foreign Language/World Cultures
- Introductory Biology I (BI 151) * (overload)+

### Second Year

#### Fall

- Humanities 1 - HI 201 recommended
- Organic Chemistry I (CH 231)
- General Physics I (PH 201)
- Cognition and Learning (ED 209) or ED 311
- Philosophical Thinking (PL 109)
- STEP Clinical Field Experience 1 (ED 2801) 1 credit
- Physical Education Activity

#### Spring

- Humanities 2 - HI 202 recommended
- Organic Chemistry II (CH 232)
- General Physics II (PH 202)
- Instrumental Analytical Chemistry (CH 362) or General Biochemistry (BI 435) **
- Introduction to Exceptionality (ED 218) or ED 216

### Third Year

#### Fall

- (If Junior Year = Odd Year) Catholic Theology (TH 109)
- Literature MOT
- CH 204
- CH 361
- Literacy Interventions, Gr. 4-12 (ED 366)
- STEP Clin. Field Exp. 2 (ED 3801) 1 credit
- PE Activity

- (If Junior Year = Even Year) Catholic Theology (TH 109)
- Humanities 4 (Literature)
- Literature MOT
- CH 351
- Literacy Interventions, Gr. 4-12 (ED 366)
- STEP Clin. Field Exp. 2 (ED 3801) 1 credit
- PE Activity

#### Spring

- Intermediate Theology (TH 200-300 level)
- Curriculum & Instruction I (ED330)
- Humanities 3 (Art)
- Senior Research Seminar (CH 455)
- CH 362 or General Biochemistry (BI 435) **
- STEP Clin. Field Exp. 3 (ED 3802) 1 credit

### Fourth Year

#### Fall

- (If Senior Year = Even Year) ED 413 & Lab 2 credits
- Adv. Teach & Asses (ED 405)
- Teaching English Learners (ED 373)
- The Inclusive Classroom (ED 364)
- Values Seminar (ED 475 recommended)
- CH 351
- Humanities 4 (Literature)
- STEP Clin. Field Exp. 4 (ED 4801) 1 credit

- (If Senior Year = Odd Year) ED 413 & Lab 2 credits
- Adv. Teach & Asses (ED 405)
- Teaching English Learners (ED 373)
- The Inclusive Classroom (ED 364)
- Values Seminar (ED 475 recommended)
- CH 204
- CH 361
- Humanities 4 (Literature)
- STEP Clin. Field Exp. 4 (ED 4801) 1 credit

#### Spring

- Student Teaching +
- ED 450 Planning of Instruction
- ED 452 Classroom Management
- ED 454 Instructional Delivery
- ED 456 Professionalism

### Additional Notes

- Due to student teaching and certification requirements, students will need to either overload two or three semesters, or take three summer school classes. No other courses may be taken during student teaching.

- *STEP Controlled Requirements

- **Students who are sophomores in an odd/even year (e.g.2009/2010) must take BI 435 in sophomore year.

### Note

Any STEP student who wants to complete a year of Physical Chemistry may elect CH 352, which is a requirement for all B.S. chemistry students, except STEP students. However, this would require an additional semester of overloading or an additional summer course.

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Dr. J. Rance-Roney, Director STEP
Dr. S. Mattingly, Director of Advising and Retention

Effective fall, 2010