Resolution #7 1990-91

TO: President John E. Van de Watering
FROM: The Faculty Senate

Meeting on 10/23/90

(Date)

RE: X I. Formal Resolution (Act of Determination)
   II. Recommendation (Urging the fitness of)
   III. Other (Notice, Request, Report, etc.)

SUBJECT: Revisions to the Secondary Chemistry 7-12 Certification BA, BS Programs proposed by the
Department of Education and Human Development and
the Department of Chemistry.

Signed
(For the Senate)
Date Sent 10/30/90

TO: The Faculty Senate
FROM: President John E. Van de Watering

RE: I. Decision and Action Taken on Formal Resolution
   a. Accepted. Effective Date 11/91
   b. Deferred for discussion with the Faculty Senate on
   c. Unacceptable for the reasons contained in the attached explanation

II, III.
   a. Received and acknowledged
   b. Comment:

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See back for distribution

Distribution Date 11/90
Signed (President of the College)
PROPOSED REVISIONS
SECONDARY CHEMISTRY 7-12

BA, BS

HEGIS CODE: 1905.01

PROGRAM CODE:
03447 BA
12094 BS

DEPT. OF EDUCATION AND HUMAN DEVELOPMENT 9/1/90
PROGRAM REVISIONS - SECONDARY SCIENCE 7-12

A. Changes in Arts & Sciences requirements:

1. All students will complete a major and a minor in the sciences. (No change except that the minor was not previously specifically required for Earth Science).

   All students will be required to complete one additional year in two other science disciplines (16 hours). Brockport students will be certified to teach general science in addition to the primary area of certification.

2. All students will be required to complete NAS 486 Laboratory Science Safety.*

   Rationale: Teachers of any sciences must be cognizant of state and national safety regulations and must also be competent in ensuring a safe environment for their students in the science classrooms and labs.

   *Exception: Chemistry majors who are required to take the appropriate chemistry safety course.

3. One year's study of a language other than English.

B. Changes in Professional Education requirements:

1. Inclusion of a foundations course designed to provide early experience in schools and historical social and philosophical foundations (EDI 320 Self, Schools and Society). This course replaces SOC 412 Schools, Learning and Society and/or EDI 412 Self, Schools and Society. 3 credit hours.

2. Development of a new laboratory methods course in each of the science disciplines.

C. Changes in Course Content (Professional Area)

Other changes will be made in course content to ensure that students are prepared to teach students from minority cultures, gifted-talented students, students with handicapping conditions and students from homes where a language other than English is spoken.

D. Comparison of Old and New Professional Sequence

<table>
<thead>
<tr>
<th>OLD</th>
<th>NEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSH 484 Adolescence</td>
<td>EDI 320 Self, School &amp; Society 3 hrs</td>
</tr>
<tr>
<td>HLS 370 Drug Educ. for Teachers 1 hr.</td>
<td>HLS 370 Drug Educ. for Teachers 1 hr.</td>
</tr>
<tr>
<td>EDI 41X Methods of Teaching XXX 3 hrs.</td>
<td>PSH 484 Adolescence 3 hrs</td>
</tr>
<tr>
<td>EDI 440 Practicum 12 hrs.</td>
<td>EDI 447 Methods of Teaching 3 hrs</td>
</tr>
<tr>
<td>EDI 441 Problems 3 hrs.</td>
<td>Secondary Science</td>
</tr>
<tr>
<td>SOC 412/EDI 412 School &amp; Society 3 hrs.</td>
<td>*CHM 480 Practical Chemistry Lab. 3 hrs</td>
</tr>
<tr>
<td></td>
<td>Pedagogy</td>
</tr>
<tr>
<td></td>
<td>EDI 475 Practicum 12 hrs</td>
</tr>
<tr>
<td></td>
<td>EDI 476 Seminar 3 hrs</td>
</tr>
<tr>
<td></td>
<td>*Example from Chemistry</td>
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Currently Registered Program

<table>
<thead>
<tr>
<th>PROGRAM CODE</th>
<th>HECIS</th>
<th>DEGREE</th>
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<tr>
<td>03447</td>
<td>1905.01</td>
<td>BA</td>
</tr>
<tr>
<td>12094</td>
<td>1905.01</td>
<td>BS</td>
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</table>

**EDUCATION PROGRAM REQUIREMENTS**

Institution: SUNY, College at Brockport

Program Title: Chemistry "7-12"  Degree: BA/BS

**Required Courses in Academic Discipline**

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 205-206</td>
<td>College Chemistry I, II</td>
<td>8</td>
</tr>
<tr>
<td>CHM 301</td>
<td>Chemical Safety</td>
<td>1</td>
</tr>
<tr>
<td>CHM 303</td>
<td>Quantitative Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CHM 305-306</td>
<td>Organic Chemistry I, II</td>
<td>8</td>
</tr>
<tr>
<td>CHM 400-401</td>
<td>Chemistry Seminar I, II</td>
<td>1</td>
</tr>
<tr>
<td>CHM 405-406</td>
<td>Physical Chemistry I, II</td>
<td>6</td>
</tr>
<tr>
<td>CHM 408-409</td>
<td>Physical Chem. Lab I, II</td>
<td>2</td>
</tr>
<tr>
<td>MTH 201,202,203</td>
<td>Calculus I,II,III</td>
<td>9 Required co-requisites</td>
</tr>
<tr>
<td>PHS 201-202</td>
<td>College Physics I,II</td>
<td>8 Required co-requisites</td>
</tr>
</tbody>
</table>

Additional elective credits in the discipline, if required ______ 3

Total number of credits in academic discipline ______ 33 min.

**Required Courses in Pedagogy**

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDI 320</td>
<td>Self, Schools &amp; Society</td>
<td>3</td>
</tr>
<tr>
<td>PSH 484</td>
<td>Adolescence</td>
<td>3</td>
</tr>
<tr>
<td>HLS 370</td>
<td>Drug Education for Teachers</td>
<td>1</td>
</tr>
<tr>
<td>EDI 433</td>
<td>Methods of Teaching Secondary Science</td>
<td>3</td>
</tr>
<tr>
<td>EDI 440</td>
<td>Student Teaching Practicum</td>
<td>12</td>
</tr>
<tr>
<td>EDI 441</td>
<td>Problems of Secondary Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional elective credits in pedagogy, if required ______

Total number of credits in pedagogy ______ 25
PROPOSED REVISION
SECONDARY CHEMISTRY 7-12
TEACHER CERTIFICATION

This program is designed to prepare students to teach chemistry in New York State schools in grades 7-12. In addition to certification in chemistry, the student will also meet the New York State requirements for certification in the area of a minor and in general science.

Program Requirements

I. General Education Requirements
   Students must meet the general education requirements in place at the time of acceptance

II. Pre Professional Preparation:

   Major in Chemistry

   The student must earn a minimum of 33 credits in chemistry, complete one year of college-level physics with laboratory, and three semesters of calculus.

   Required Courses (33 credits)
   The following courses are required of all majors:
   CHM 205-206 College Chemistry I,II 8
   CHM 301 Chemical Safety 1*
   CHM 303 Quantitative Analysis 4
   CHM 305-306 Organic Chemistry I,II 8
   CHM 400-401 Chemistry Seminar I,II 1
   CHM 405-406 Physical Chemistry I,II 6
   CHM 408-409 Physical Chemistry Laboratory I,II 2
   CHM 480 Practical Chemistry Laboratory Pedagogy 3
   Credits in Chemistry Total 33

   MTH 201-202-203 Calculus I,II,III 9
   PHS 201-202 College Physics I,II 8
   Other Math and Science Requirements Total 17

   The above requirements refer to the chemistry major. In addition, the following requirements must be met for teacher certification:

   Minor in a second science 18
   Four semesters of additional science w/lab 16
   (Two semesters study in each of two additional science disciplines other than the major and minor)
   NAS 486 Laboratory Science Safety 3

   *This course, required for the chemistry major, is waived for candidate's for teaching certification. (They must include NAS 486 Laboratory Science Safety.)
III. Pre-Professional Preparation: Foreign Language 0-6 hours
The equivalent of one year of college level study in a language other than English is required for teacher certification in New York State.

IV. Professional Preparation: Education Courses 13 hours
- EDI 320 Self, Schools and Society 3 hours
- HLS 370 Drug Education for Teachers 1 hour
- PSH 484 Adolescence 3 hours
- EDI 447 Methods of Teaching Sec. Science 3 hours
- CHM 480 Practical Chemistry Lab. Pedagogy 3 hours

V. Professional Preparation: Student Teaching and Senior Seminar: 15 hours
- EDI 475 Practicum 12 hours
- EDI 476 Seminar in Secondary Education 3 hours

Total Hour Requirements
- General Education 28 or more, depending on courses chosen
- Chemistry Major 32
- Math and Physics 17
- Minor in Second Science and Other Science Req. 29
- Foreign Language 0-6
- Education courses and practicum 134 minimum

More if language not satisfied
More if not ready for Calculus upon entry
NEW COURSE DESCRIPTIONS
SECONDARY CHEMISTRY

EDI 320  Self, Schools and Society  3 credit hours
A beginning course in secondary education designed to introduce
students to the role of teaching and learning in contemporary
American society. Includes historical, sociological, philosophical
and psychological foundations of education.

CHM 480  Practical Chemistry Lab. Pedagogy  3 credit hours
Prerequisite or Corequisite: PSH 484, EDI 320, EDI 447
This course is designed for students working toward secondary
teacher certification in chemistry and general science. Students
will be expected to develop preparation notes, solutions, and
reagents for laboratory experiments, develop a lesson plan and lead
a class in a selected experiment, and develop a grading scheme and
do the actual grading. This is intended as hands-on experience in
the practical aspects of laboratory instruction and will include
some trouble shooting of equipment.
ADMISSIONS CRITERIA

and Other Program Information

Secondary Chemistry Certification 7-12

1. **Grade Point Average (G.P.A.)** - The minimum overall GPA requirement is 2.5. However, depending on the number and quality of applicants at any point in time, the actual requirement may be higher. Some qualified candidates may not be accepted in periods of high demand.

2. **Credit Hour Requirements.** Applications will be considered after the student has completed 24 hours of college level coursework.

3. Students must maintain an overall 2.5 G.P.A. and a 2.5 G.P.A. in the major field in order to continue in the program.

4. Effective 9/1/90 the NTE Core Battery Tests of Communication Skills and General Knowledge have replaced the Basic Skills Tests as a component of the admissions/continued eligibility requirements of all certification programs.

5. Students may be accepted to a program without NTE scores, but will not be admitted to a methods course after April 1, 1991 without successfully passing the Communication Skills and General Knowledge parts of the Core Battery.

6. Students who have completed the Brockport Basic Skills Tests are exempt from the NTE requirement for admission/continued eligibility. However, all students must successfully complete the NTE in order to receive state certification.

7. **Closing dates for receipt of applications for provisional certification programs are as follows:**

   March 1 for enrollment beginning in the fall or later.

   October 1 for enrollment beginning in the spring or later.

   Applications may be reviewed after the following closing dates if seats are available:

   January 2 for enrollment beginning in the spring or later.

   June 1 for enrollment beginning in the fall or later.

   For consideration, all materials must be in by the closing date. Notification will be made approximately 3 weeks after the review date.