PROPOSAL NUMBER: 99-733
CURRICULUM PROPOSAL FORM

*DEADLINES:

PROPOSAL TITLE: Changing the major Requirement for Chemistry Majors
SPONSOR/S: Dr. Cathy F. Yang
DEPARTMENT: Chemistry & Physics

CHECK ALL THAT APPLY:
- UNDERGRADUATE
- GRADUATE

COLLEGE: LAS
If LAS:
- History/Humanities
- Math/Sciences
- X Social/Behavioral Sciences

TYPE OF PROPOSAL (Check ALL that Apply)
- General Education
- New Course in Bank
- Existing course, Add To Bank
- Multicultural/Global Designation
- Writing Intensive Designation
- X New Minor/Concentration/Specialization
- New Major/Degree Program
- Short Term Course Proposal
- New Course (NOT Gen. Ed.)
- Name Change (Dept., School, Major)
- Changes in Degree Requirements
- Changes Involve Gen. Ed. requirements
- Minor Changes to Existing Courses
- Course is NOT General Education
- Course IS General Education

DEPARTMENT (SIGNATURE INDICATES APPROVAL)

DEPT. CURRICULUM CHAIR / DATE
DEPT. CHAIRPERSON / DATE

COLLEGE CURRICULUM COMMITTEE
DATE OF OPEN HEARING (if necessary)

APPROVED
- NOT APPROVED
COMMENTS:

SIGNATURE DATE

ACADEMIC DEAN (& GRADUATE DEAN, for New Graduate Programs Only)

APPROVED
- NOT APPROVED
COMMENTS:

SIGNATURE (Academic Dean) DATE

SIGNATURE (Graduate Dean) DATE
UNIVERSITY CURRICULUM COMMITTEE

3/18/99 (college level only)

✓ APPROVED
— NOT APPROVED

COMMENTS:

Signature: Sierra Rico 3/19/99

DATE

SENATE

Date announced at Senate: 3/2/99

Voted upon at Senate: Approved Not Approved Date:

EXECUTIVE VICE PRESIDENT/PROVOST

✓ APPROVED

— NOT APPROVED If no, reasons are as follows:

STUDENT CREDIT HOURS FACULTY LOAD HOURS EQUALIZED CREDIT HOURS

OFFICIAL COPY & APPROVAL SHEET FILED (DATE):

DATE/SIGNATURE EXECUTIVE VICE PRESIDENT/PROVOST

REGISTRAR

DATE APPROVED COURSE DESCRIPTION RECEIVED

HEGIS TAXONOMY & COURSE NUMBER ASSIGNED

DATE/SIGNATURE OF REGISTRAR

NOTIFICATION FORWARD:

✓ SENATE CURRICULUM COMMITTEE CHAIRPERSON

J DEPARTMENT CHAIRPERSONS

J ACADEMIC DEAN(S)

J REGISTRAR

J SPONSOR(S)

curriculum/currms.989/999/prop.wpd
Rowan University
Department of Chemistry and Physics

Minor Curricular Change
Changing the Major Requirement for Chemistry Majors

1. Details
   a. Change requested: Change Major Requirements
      From: Elective 1907.348 Biochemistry
      To: Required course 1907.348 Biochemistry (see attached curriculum change)

   b. Sponsor: Cathy F. Yang, Assistant Professor, Department of Chemistry and Physics

2. Rationale
   a. Statement of "need" for such a change:
      Biochemistry has undergone an astounding expansion in the past decade that profoundly
      diffuses into chemistry disciplines. American Chemical Society (ACS) survey has found that
      biochemistry accounted for more than 50% of all papers and patents in various fields of
      chemistry. The need to include some exposure to biochemistry in all approved chemistry
      programs has long been debated within the chemistry community. The Committee on
      Professional Training (CPT) of American Chemical Society (ACS) decided in the spring of 1997
      that "ACS-approved curricula shall include the equivalent of three credit hours of biochemistry,
      which shall be required for student certification." Fundamentally, CPT decided that future
      professional chemists would be at a disadvantage if they knew no biochemistry. As a certified
      Chemistry program, we wish to implement this requirement for our majors immediately.

   b. Statement of curricular effect:
      In the modified degree program, the Core courses increase from 45 SH to 49 SH; the
      Restricted Electives are reduced to 14 SH from 16 SH and the Free Electives will then be
      reduced to 10 SH. The total required hours remains at 123 s.h. This change will take place
      immediately. Current Chemistry/Physical Science majors will have a choice of degree programs.
      All chemistry majors choosing the New General Education Model (1998) will be advised to
      follow the new requirements.

3. Results of Consultation
   Consultation has been internal to the Department; the Department has approved this change.
<table>
<thead>
<tr>
<th>Current Degree Program</th>
<th>Proposed Degree Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education  50 SH</td>
<td>General Education  50 SH</td>
</tr>
<tr>
<td><strong>COMMON CORE    45 SH</strong></td>
<td><strong>COMMON CORE    49 SH</strong></td>
</tr>
<tr>
<td>- Intro to Programming</td>
<td>- Intro to Programming</td>
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<tr>
<td>- Chemistry I and II</td>
<td>- Chemistry I and II</td>
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<tr>
<td>- Organic Chemistry I and II</td>
<td>- Organic Chemistry I and II</td>
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<tr>
<td>- Quantitative Analysis</td>
<td>- Quantitative Analysis</td>
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<tr>
<td>- Physical Chemistry I and II</td>
<td>- Physical Chemistry I and II</td>
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<tr>
<td>- Physical Chemistry Lab I and II</td>
<td>- Physical Chemistry Lab I and II</td>
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<tr>
<td>- Advanced Inorganic Chemistry</td>
<td>- Advanced Inorganic Chemistry</td>
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<tr>
<td>- Seminar I or Seminar II</td>
<td>- Seminar I or Seminar II</td>
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<tr>
<td>- Instrumental Methods</td>
<td>- Instrumental Methods</td>
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<tr>
<td>- Co-op or Intro to Research</td>
<td>- Co-op or Intro to Research</td>
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<tr>
<td><strong>Restricted Electives  16 SH</strong></td>
<td><strong>Restricted Electives  14 SH</strong></td>
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<tr>
<td>Chosen with approval of advisor.</td>
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<tr>
<td>12 SH must be in upper level chemistry and at least three</td>
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<tr>
<td>of these courses must have a Physical Chemistry prerequisite.</td>
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<tr>
<td><strong>Free Electives  12 SH</strong></td>
<td><strong>Free Electives  10 SH</strong></td>
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<tr>
<td>Chosen with the help of advisor and with consideration for</td>
<td></td>
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<tr>
<td>future educational and career plans.</td>
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<tr>
<td><strong>TOTAL</strong>  123 SH</td>
<td><strong>TOTAL</strong>  123 SH</td>
</tr>
</tbody>
</table>