1. Submitting College: COST

2. Department(s) Generating The Proposal: Natural Sciences
Choose an item. (if needed)

3. Proposal Title: Revised Chemistry Program Curriculum

4. Course Number(s): Click here to enter text.

5. Course Title(s): Click here to enter text.

6. Effective Date: Fall Year: 2012

7. Brief Summary of Proposal: The proposed revised curriculum will give our students more choices of elective courses. The number of elective hours will increase from 7 to 12 hours for the ACS Certified BS degree and from 7 to 15 for the BS degree. More in-depth courses are added. Students may now choose elective courses from upper level Biology, Forensic Science and Marine Science.

8. Type of Proposal: Program Change If other, please describe: Click here to enter text.

9. Impact on Library Holdings
   Existing: None
   Additional: Click here to enter text.
   Deletions: Click here to enter text.

10. Impact on Existing Programs: Chemistry majors choosing electives from other programs may increase the number of enrollment in those courses.

11. Additional Resources Required
   Personnel: None
   Non-personnel: None

12. Approvals:
   - Department Curriculum Committee Signature_________________________ Date________________
   - Department Chair Signature_________________________ Date________________
   - College Curriculum Committee Signature_________________________ Date________________
   - College Dean Signature_________________________ Date________________
   - Vice President of Academic Affairs Signature_________________________ Date________________
     (Chair of the New Programs and Curriculum Committee)
   - Faculty Senate Signature_________________________ Date________________
CHEMISTRY PROGRAM

Bachelor of Science in Chemistry (ACS Certified)
Areas A, B, C, E and additional requirements 48 hours
Note: Required Area D courses are BIOL 1107, 1107L, 1108, 1108L and additional 3-hour course

Area F Courses appropriate to the program of study 17 hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2101</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2111</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1211</td>
<td>Principles of Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1211L</td>
<td>Principles of Chemistry Lab I</td>
<td>1 hour</td>
</tr>
<tr>
<td>CHEM 1212</td>
<td>Principles of Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 2101K</td>
<td>Chemistry Research Methods</td>
<td>2</td>
</tr>
</tbody>
</table>

Area G Major Requirements 60 hours

Chemistry Foundation Requirements 37 hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1212L</td>
<td>Principles of Chemistry Lab II</td>
<td>1 hour</td>
</tr>
<tr>
<td>CHEM 2501</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 2501L</td>
<td>Organic Chemistry Lab I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 2511</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 2511L</td>
<td>Organic Chemistry Lab II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 3101K</td>
<td>Analytical Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3111K</td>
<td>Instrumental Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3201K</td>
<td>Inorganic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3401K</td>
<td>Physical Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3411K</td>
<td>Physical Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3522L</td>
<td>Advanced Synthesis Laboratory</td>
<td>2 hours</td>
</tr>
<tr>
<td>CHEM 3602</td>
<td>Chemical Research</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 3801</td>
<td>Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4901</td>
<td>Chemical Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

Electives 12 hours

Choose any two courses from the following 6 hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 4111</td>
<td>Bioanalytical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4201</td>
<td>Advanced Inorganic Chemistry</td>
<td>3 hours</td>
</tr>
<tr>
<td>CHEM 4401</td>
<td>Advanced Physical Chemistry</td>
<td>3 hours</td>
</tr>
<tr>
<td>CHEM 4531</td>
<td>Advanced Organic Chemistry</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose any one course from the following 3 hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 4532</td>
<td>Medicinal Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4601</td>
<td>Polymer Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4801</td>
<td>Advanced Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4902</td>
<td>Special Topics in Chemistry</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

Free Elective 3 hours

Choose upper level (4000) Forensic Science course

Additional Requirements 11 hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2211K</td>
<td>Principles of Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2212K</td>
<td>Principles of Physics II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 3101</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

Exit Exam
Students must take the exit exam no later than the semester before their graduating semester. A student receiving unsatisfactory grade will enroll in CHEM 4902 Special Topics in Chemistry the following semester.
Bachelor of Science in Chemistry

Areas A, B, C, E and additional requirements 48 hours

Note: Required Area D courses are BIOL 1107, 1107L, 1108, 1108L and additional 3-hour course

Area F: Courses appropriate to the program of study 17 hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2101</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 2111</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1211</td>
<td>Principles of Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1211L</td>
<td>Principles of Chemistry Lab I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 1212</td>
<td>Principles of Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 2101K</td>
<td>Chemistry Research Methods</td>
<td>2</td>
</tr>
</tbody>
</table>

Area G: Major Requirements 60 hours

Chemistry Foundation Requirements 37 hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1212</td>
<td>Principles of Chemistry Lab I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 2501</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 2501L</td>
<td>Organic Chemistry Lab I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 2511</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 2511L</td>
<td>Organic Chemistry Lab II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 3101K</td>
<td>Analytical Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3111K</td>
<td>Instrumental Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3121K</td>
<td>Inorganic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3401K</td>
<td>Physical Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3411K</td>
<td>Physical Chemistry II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 3522L</td>
<td>Advanced Synthesis Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 3602</td>
<td>Chemical Research</td>
<td>2</td>
</tr>
<tr>
<td>CHEM 3801</td>
<td>Biochemistry Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4901</td>
<td>Chemical Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

Electives 9 hours

Choose any three courses from the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>CHEM 4211</td>
<td>Bioanalytical Chemistry</td>
<td>3</td>
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<tr>
<td>CHEM 4121</td>
<td>Advanced Inorganic</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4401</td>
<td>Advanced Physical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4531</td>
<td>Advanced Organic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4202</td>
<td>Medicinal Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4601</td>
<td>Polymer Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4801</td>
<td>Advanced Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 4902</td>
<td>Special Topics in Chemistry</td>
<td>3</td>
</tr>
</tbody>
</table>

Free Elective 6 hours

Choose upper level courses in Forensic Science, Biology and/or Marine Science

Additional Requirements 8 hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 1111K</td>
<td>Introductory Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 1112K</td>
<td>Introductory Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

Or

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 2211K</td>
<td>Principles of Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 2212K</td>
<td>Principles of Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

Exit Exam

Students must take the exit exam no later than the semester before their graduating semester. A student receiving unsatisfactory grade will enroll in CHEM 4801 Special Topics in Chemistry the following semester.

Pre-Professional Program: Chemistry majors who are interested in gaining admission into Medical, Dental or Pharmacy Schools may concurrently enroll in the required courses for admission into the professional schools.
1. **Program Name:** Chemistry

2. **Rationale:** The changes will give students more flexibility for electives. The changes will also resolve the number of required electives for the two tracks.

3. **Resource Statement:** No additional resources required

4. **Additional existing courses required for completion of program:** None

5. **Additional new courses required for completion of program [Attach Form II for each course]:**
   - CHEM 2601K Chemistry Research Methods 2 hours
   - CHEM 3121K Inorganic Chemistry 3 hours

6. **Additional existing courses which can be used as electives in program:**
   - BS Chemistry ACS Certified
   - CHEM 4201 Advanced Inorganic Chemistry 3 hours
   - CHEM 4532 Medicinal Chemistry 3 hours
   - CHEM 4801 Advanced Biochemistry 3 hours
   - CHEM 4902 Special Topics in Chemistry 3 hours
   - Upper level (4000) Forensic Science course 3 hours
   - MATH 3101 Linear Algebra 3 hours

   BS Chemistry
   - CHEM 4121 Advanced Inorganic 3 hours
   - CHEM 4202 Medicinal Chemistry 3 hours
   - CHEM 4801 Advanced Biochemistry 3 hours
   - CHEM 4902 Special Topics in Chemistry 3 hours
   - Upper level courses in Forensic Science, Biology and/or Marine Science 6 hours

7. **Additional new courses which can be used as electives in program [Attach Form II for each course]:**
   - CHEM 4211 Bioanalytical Chemistry 3 hours
   - CHEM 4401 Advanced Physical Chemistry 3 hours

8. **Deletion of existing required courses [Attach Form III for each course]:**
   - CHEM 2101 Laboratory Synthesis 2 hours
   - CHEM 3101L Analytical Chemistry Lab 1 hour
   - CHEM 3201L Instrumental Analysis Lab 1 hour
   - CHEM 3401L Physical Chemistry Lab I 1 hour
   - CHEM 3411L Physical Chemistry Lab II 1 hour
   - CHEM 4301L Chemistry of the Environment 1 hour
   - CHEM 4601L Polymer Chemistry Lab 1 hour
   - CSCI 1301 Computer Science I 3 hours
   - Languages Spanish/German/French 6 hours
   - MATH 1212 Calculus III 4 hours

Languages Spanish/German/French 6 hours
9. **Deletion of existing elective courses** [Attach Form III for each course]:
   Click here to enter text.

10. **Existing course changes** [Attach Form IV for each course]:
    - CHEM 3101 CHEM 3101K Analytical Chemistry 4 hours
    - CHEM 3201 CHEM 3111K Instrumental Analysis 4 hours
    - CHEM 3401 CHEM 3401K Physical Chemistry I 4 hours
    - CHEM 3411 CHEM 3411K Physical Chemistry II 4 hours
    - CHEM 3522 CHEM 3522L Advanced Synthesis Laboratory 2 hours
    - CHEM 3302 CHEM 3602L Chemical Research 2 hours
    - CHEM 4101 CHEM 3801 Biochemistry 3 hours
    - CHEM 4111 CHEM 4801 Advanced Biochemistry 3 hours
    - CHEM 4121 CHEM 4201 Advanced Inorganic Chemistry 3 hours
    - CHEM 4201 CHEM 4532 Medicinal Chemistry 3 hours

11. **Change in admissions requirements:** No changes

12. **Change in other degree requirements:** No changes

13. **Change in number of required credits:** No changes

14. **Change in number of elective credits:** From 7 credit hours to 12 credit hours for the ACS Certified BS Chemistry and 7 credit hours to 15 credit hours for BS Chemistry.

15. **Change in number of total credits required for the degree:** No changes

16. **Other information:** A minimum of C is required for prerequisites for all chemistry courses.
1. **Course Number:** CHEM 2601K

2. **Course Title:** Chemistry Research Methods

3. **Catalogue Description:** Review of the research process. Construct a literature review, including the use of computer based tools, and critically analyze research papers. Introduction to performing systematic independent investigation, critically interpreting results in the context of previous studies, and communicating research results as a scientific report.

4. **Rationale:** This course will provide an introduction into nature of chemical research and prepare students for their senior research.

5. **Credit Hours:** 2

6. **Pre-requisites:** CHEM 1212

7. **Syllabus:** [Click here to enter text.]

8. **Similarity to or duplication of Existing Courses:** [Click here to enter text.]

9. **Textbook selection:** [Click here to enter text.]

10. **Grading:** [Click here to enter text.]
1. **Course Number:** CHEM 3201K

2. **Course Title:** Inorganic Chemistry

3. **Catalogue Description:** Fundamental principles of inorganic chemistry. Topics include electronic structure of atoms, inorganic bonding theories, group theory, coordination chemistry, and spectroscopic applications. The accompany lab reinforces concepts of the topics discussed in lecture course.

4. **Rationale:** This is a lower level Inorganic Chemistry course including laboratory, which prepares students for the advanced level courses in Inorganic Chemistry.

5. **Credit Hours:** 2

6. **Pre-requisites:** CHEM 1212

7. **Syllabus:** Click here to enter text.

8. **Similarity to or duplication of Existing Courses:** Click here to enter text.

9. **Textbook selection:** Click here to enter text.

10. **Grading:** Click here to enter text.
1. Course Number: CHEM 4401

2. Course Title: Advanced Physical Chemistry

3. Catalogue Description: Click here to enter text.

4. Rationale: This will be one of the in-depth courses that prepare students for graduate school and/or the industry. It will also be used to partly fulfill the ACS Certified degree requirements.

5. Credit Hours: 3

6. Pre-requisites: CHEM 3411K

7. Syllabus: Click here to enter text.

8. Similarity to or duplication of Existing Courses: Click here to enter text.

9. Textbook selection: Click here to enter text.

10. Grading: Click here to enter text.
1. **Course Number:** CHEM 2101

2. **Course Title:** Laboratory Synthesis

3. **Catalog Description:** This laboratory course is designed to prepare chemistry majors for upper level laboratory courses. The laboratory experiments will include quantitative analysis, inorganic synthesis and computational methods.

4. **Rationale:** The course is replaced with a new course.

5. **Library Resource Deletions:** Click here to enter text.
1. **Course Number:** CHEM 3101L

2. **Course Title:** Analytical Chemistry Lab

3. **Catalog Description:** Lab taken concurrently with CHEM 3101

4. **Rationale:** The lecture and lab courses are combined to a K course.

5. **Library Resource Deletions:** Click here to enter text.
<table>
<thead>
<tr>
<th></th>
<th>Course Number:</th>
<th>CHEM 3201L</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Course Title:</td>
<td>Instrumental Analysis Lab</td>
</tr>
<tr>
<td>3</td>
<td>Catalog Description:</td>
<td>Lab taken concurrently with CHEM 3201</td>
</tr>
<tr>
<td>4</td>
<td>Rationale:</td>
<td>The lecture and lab courses are combined to a K course.</td>
</tr>
<tr>
<td>5</td>
<td>Library Resource Deletions:</td>
<td>Click here to enter text.</td>
</tr>
</tbody>
</table>
1. **Course Number:** CHEM 3401L

2. **Course Title:** Physical Chemistry Lab I

3. **Catalog Description:** Equilibrium electrochemistry, chemical kinetics, reaction dynamics, quantum theory, atomic and molecular structure, modern spectroscopy.

4. **Rationale:** The lecture and lab courses are combined to a K course.

5. **Library Resource Deletions:** Click here to enter text.
1. **Course Number:** CHEM 3411L
2. **Course Title:** Physical Chemistry Lab II
3. **Catalog Description:** Lab taken concurrently with CHEM 3411.
4. **Rationale:** The lecture and lab courses are combined to a K course.
5. **Library Resource Deletions:** Click here to enter text.
1. **Course Number:** CHEM 4301L

2. **Course Title:** Chemistry of the Environment Lab

3. **Catalog Description:** Lab taken concurrently with CHEM 4301.

4. **Rationale:** The lecture and lab courses are combined to a K course.

5. **Library Resource Deletions:** Click here to enter text.
1. **Course Number:** CHEM 4601L

2. **Course Title:** Polymer Chemistry Lab

3. **Catalog Description:** Lab taken concurrently with CHEM 4610.

4. **Rationale:** The lecture and lab courses are combined to a K course.

5. **Library Resource Deletions:** Click here to enter text.
1. **Course Number**
   - Current: CHEM 3101
   - New: CHEM 3101K

2. **Course Title**
   - Current: Analytical Chemistry
   - New: Same

3. **Catalog Description**
   - New: Same

4. **Rationale:**
   - The current lecture and lab courses are combined into K course.

5. **Library Resource Statement**
   - Existing: Click here to enter text.
   - Additional: Click here to enter text.
   - Deletions: Click here to enter text.

6. **Credit Hours**
   - Current: 3
   - New: 4

7. **Pre-requisites**
   - Current: CHEM 1212
   - New: CHEM 1212 and 1212L
   - Deletions: Click here to enter text.

8. **Syllabus:**
   - Click here to enter text.

9. **Similarity to or Duplication of Existing Courses:**
   - Click here to enter text.

10. **Textbook Change (include title, author and ISBN#)**
    - Current: Click here to enter text.
    - New: Click here to enter text.

11. **Grading Method**
    - Current: Click here to enter text.
    - New: Click here to enter text.
1. **Course Number**
   - Current: CHEM 3201
   - New: CHEM 3111K

2. **Course Title**
   - Current: Instrumental Analysis
   - New: Same

3. **Catalog Description**
   - Current: Instrumental techniques used in chemical analysis with emphasis on accuracy and precision. Statistical and regression methods for interpretation of data.
   - New: Same

4. **Rationale:** The current lecture and lab courses are combined into K course.

5. **Library Resource Statement**
   - Existing: Click here to enter text.
   - Additional: Click here to enter text.
   - Deletions: Click here to enter text.

6. **Credit Hours**
   - Current: 3
   - New: 4

7. **Pre-requisites**
   - Current: CHEM 3101
   - New: CHEM 3101K
   - Deletions: Click here to enter text.

9. **Syllabus:** Click here to enter text.

10. **Similarity to or Duplication of Existing Courses:** Click here to enter text.

11. **Textbook Change (include title, author and ISBN#)**
   - Current: Click here to enter text.
   - New: Click here to enter text.

12. **Grading Method**
    - Current: Click here to enter text.
    - New: Click here to enter text.
### Course Change Page – Form IV

1. **Course Number**
   - Current: CHEM 3401
   - New: CHEM 3401K

2. **Course Title**
   - Current: Physical Chemistry I
   - New: Same

3. **Catalog Description**
   - Current: Thermochemistry, thermodynamics, equilibria, electrochemistry, kinetics and quantum mechanics.
   - New: Same

4. **Rationale:**
   - The current lecture and lab courses are combined into K course.

5. **Library Resource Statement**
   - Existing: Click here to enter text.
   - Additional: Click here to enter text.
   - Deletions: Click here to enter text.

6. **Credit Hours**
   - Current: 3
   - New: 4

7. **Pre-requisites**
   - Current: CHEM 1212
   - New: CHEM 1212/1212L and MATH 2111
   - Deletions: Click here to enter text.

10. **Syllabus:**
    - Click here to enter text.

11. **Similarity to or Duplication of Existing Courses:**
    - Click here to enter text.

12. **Textbook Change (include title, author and ISBN#)**
    - Current: Click here to enter text.
    - New: Click here to enter text.

13. **Grading Method**
    - Current: Click here to enter text.
    - New: Click here to enter text.
1. **Course Number**
   - Current: CHEM 3411
   - New: CHEM 3411K

2. **Course Title**
   - Current: Physical Chemistry II
   - New: Same

3. **Catalog Description**
   - Current: Liquids, solids, surface and transport phenomena. Modern treatment of atom, structure, spectroscopy, statistical mechanics and statistical thermodynamics
   - New: Same

4. **Rationale:**
   - The current lecture and lab courses are combined into a K course.

5. **Library Resource Statement**
   - Existing: Click here to enter text.
   - Additional: Click here to enter text.
   - Deletions: Click here to enter text.

6. **Credit Hours**
   - Current: 3
   - New: 4

7. **Pre-requisites**
   - Current: CHEM 3401
   - New: CHEM 3401K
   - Deletions: Click here to enter text.

8. **Syllabus:**
   - Click here to enter text.

12. **Similarity to or Duplication of Existing Courses:**
   - Click here to enter text.

13. **Textbook Change (include title, author and ISBN#)**
   - Current: Click here to enter text.
   - New: Click here to enter text.

14. **Grading Method**
   - Current: Click here to enter text.
   - New: Click here to enter text.
1. **Course Number**
   - Current: CHEM 3522
   - New: CHEM 3522L

2. **Course Title**
   - Current: Advanced Synthesis Laboratory
   - New: Same

3. **Catalog Description**
   - Current: The focus of this laboratory course will be on advanced synthetic methods in organic, inorganic chemistry and biochemistry. A wide range of compounds will be synthesized and characterized using appropriate separation and spectroscopic techniques. The interpretation of spectroscopic spectra will be emphasized. There will be two three-hour labs per week.
   - New: The focus of this laboratory course will be on advanced synthetic methods in organic and biochemistry. A wide range of compounds will be synthesized and characterized using appropriate separation and spectroscopic techniques. The interpretation of spectroscopic spectra will be emphasized. There will be two three-hour labs per week.

4. **Rationale:**
   - The course name is changed to indicate that the course is a laboratory course.

5. **Library Resource Statement**
   - Existing: Click here to enter text.
   - Additional: Click here to enter text.
   - Deletions: Click here to enter text.

6. **Credit Hours**
   - Current: 2
   - New: 2

7. **Pre-requisites**
   - Current: CHEM 2501/2501L
   - New: CHEM 2511/2511L
   - Deletions: Click here to enter text.

8. **Syllabus:**
   - Click here to enter text.

9. **Similarity to or Duplication of Existing Courses:**
   - Click here to enter text.

10. **Textbook Change (include title, author and ISBN#)**
    - Current: Click here to enter text.
    - New: Click here to enter text.

11. **Grading Method**
    - Current: Click here to enter text.
    - New: Click here to enter text.
New Programs and Curriculum Committee  
Course Change Page – Form IV

1. **Course Number**  
   Current: CHEM 3302  
   New: CHEM 3602K

2. **Course Title**  
   Current: Chemical Research  
   New: Same

3. **Catalog Description**  
   Current: Supervised research including literature search, laboratory experimentation, and interpretation and presentation of  
   New: Same

4. **Rationale:** Course number is changed to conform with the assignment of numbers to the traditional divisions of chemistry.

5. **Library Resource Statement**  
   Existing: Click here to enter text.  
   Additional: Click here to enter text.  
   Deletions: Click here to enter text.

6. **Credit Hours**  
   Current: 2  
   New: 2

7. **Pre-requisites**  
   Current: Junior Standing  
   New: CHEM 2101K, CHEM 2511/2511L, CHEM 3201K and CHEM 3411K  
   Deletions: Click here to enter text.

8. **Syllabus:** Click here to enter text.

9. **Similarity to or Duplication of Existing Courses:** Click here to enter text.

10. **Textbook Change (include title, author and ISBN#)**  
    Current: Click here to enter text.  
    New: Click here to enter text.

11. **Grading Method**  
    Current: Click here to enter text.  
    New: Click here to enter text.
New Programs and Curriculum Committee
Course Change Page – Form IV

1. **Course Number**
   - Current: CHEM 4101
   - New: CHEM 3801

2. **Course Title**
   - Current: Biochemistry
   - New: Same

3. **Catalog Description**
   - New: Same

4. **Rationale:** Course number is changed to conform with the assignment of numbers to the traditional divisions of chemistry.

5. **Library Resource Statement**
   - Existing: Click here to enter text.
   - Additional: Click here to enter text.
   - Deletions: Click here to enter text.

6. **Credit Hours**
   - Current: 3
   - New: 3

7. **Pre-requisites**
   - Current: CHEM 2511 and BIOL 1108
   - New: Same
   - Deletions: Click here to enter text.

8. **Syllabus:** Click here to enter text.

9. **Similarity to or Duplication of Existing Courses:** Click here to enter text.

10. **Textbook Change (include title, author and ISBN#)**
    - Current: Click here to enter text.
    - New: Click here to enter text.

11. **Grading Method**
    - Current: Click here to enter text.
    - New: Click here to enter text.
New Programs and Curriculum Committee
Course Change Page – Form IV

1. **Course Number**
   - Current: CHEM 4111
   - New: CHEM 4801

2. **Course Title**
   - Current: Advanced Biochemistry
   - New: Same

3. **Catalog Description**
   - Current: Recent advances in medical biochemistry with clinical correlations. Biochemistry of metabolic diseases, neuroendocrine and reproductive biochemistry, signal transduction, receptor chemistry, transcriptional regulation, cancer biochemistry, and oncogenes and oncoproteins.
   - New: Same

4. **Rationale:** Course number is changed to conform with the assignment of numbers to the traditional divisions of chemistry.

5. **Library Resource Statement**
   - Existing: Click here to enter text.
   - Additional: Click here to enter text.
   - Deletions: Click here to enter text.

6. **Credit Hours**
   - Current: 3
   - New: 3

7. **Pre-requisites**
   - Current: CHEM 4101
   - New: CHEM 3801
   - Deletions: Click here to enter text.

8. **Syllabus:** Click here to enter text.

9. **Similarity to or Duplication of Existing Courses:** Click here to enter text.

10. **Textbook Change (include title, author and ISBN#)**
    - Current: Click here to enter text.
    - New: Click here to enter text.

11. **Grading Method**
    - Current: Click here to enter text.
    - New: Click here to enter text.

Savannah State University
New Programs and Curriculum Committee
Course Change Page – Form IV

1. **Course Number**
   - Current: CHEM 4121
   - New: CHEM 4201

2. **Course Title**
   - Current: Advanced Inorganic Chemistry
   - New: Same

3. **Catalog Description**
   - Current: Principles of inorganic chemistry with emphasis on atomic structure, chemical bonding, solid state, coordination chemistry, organic metallic chemistry, and acid-base theories. Chemistry of selected elements.
   - New: Same

4. **Rationale:** Course number is changed to conform with the assignment of numbers to the traditional divisions of chemistry.

5. **Library Resource Statement**
   - Existing: Click here to enter text.
   - Additional: Click here to enter text.
   - Deletions: Click here to enter text.

6. **Credit Hours**
   - Current: 3
   - New: 3

7. **Pre-requisites**
   - Current: CHEM 1212 and 3411
   - New: CHEM 3201K
   - Deletions: Click here to enter text.

8. **Syllabus:** Click here to enter text.

9. **Similarity to or Duplication of Existing Courses:** Click here to enter text.

10. **Textbook Change (include title, author and ISBN#)**
    - Current: Click here to enter text.
    - New: Click here to enter text.

11. **Grading Method**
    - Current: Click here to enter text.
    - New: Click here to enter text.
1. **Course Number**
   - Current: CHEM 4201
   - New: CHEM 4532

2. **Course Title**
   - Current: Medicinal Chemistry
   - New: Same

3. **Catalog Description**
   - Current: Synthesis, structure, and mode of action of therapeutically active compounds. Design of pharmaceutical agents based on enzyme mechanism, structure activity relationships, and computer modeling.
   - New: Same

4. **Rationale:**
   Course number is changed to conform with the assignment of numbers to the traditional divisions of chemistry.

5. **Library Resource Statement**
   - Existing: Click here to enter text.
   - Additional: Click here to enter text.
   - Deletions: Click here to enter text.

6. **Credit Hours**
   - Current: 3
   - New: 3

7. **Pre-requisites**
   - Current: CHEM 2511 and 3801
   - New: Same
   - Deletions: Click here to enter text.

8. **Syllabus:**
   Click here to enter text.

9. **Similarity to or Duplication of Existing Courses:**
   Click here to enter text.

10. **Textbook Change (include title, author and ISBN#)**
    - Current: Click here to enter text.
    - New: Click here to enter text.

11. **Grading Method**
    - Current: Click here to enter text.
    - New: Click here to enter text.
Summary of the Revisions

I. Deleted Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2101</td>
<td>Laboratory Synthesis</td>
<td>2 hours</td>
</tr>
<tr>
<td>CHEM 3101L</td>
<td>Analytical Chemistry Lab</td>
<td>1 hour</td>
</tr>
<tr>
<td>CHEM 3201L</td>
<td>Instrumental Analysis Lab</td>
<td>1 hour</td>
</tr>
<tr>
<td>CHEM 3401L</td>
<td>Physical Chemistry Lab I</td>
<td>1 hour</td>
</tr>
<tr>
<td>CHEM 3411L</td>
<td>Physical Chemistry Lab II</td>
<td>1 hour</td>
</tr>
<tr>
<td>CHEM 4301L</td>
<td>Chemistry of the Environment</td>
<td>1 hour</td>
</tr>
<tr>
<td>CHEM 4601L</td>
<td>Polymer Chemistry Lab</td>
<td>1 hour</td>
</tr>
</tbody>
</table>

II. Other Courses Deleted from the Curriculum

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCI 1301</td>
<td>Computer Science I</td>
<td>3 hours</td>
</tr>
<tr>
<td>Languages</td>
<td>Spanish/German/French</td>
<td>6 hours</td>
</tr>
<tr>
<td>CHEM</td>
<td>Calculus III (ACS Certified degree)</td>
<td>4 hours</td>
</tr>
</tbody>
</table>

III. Changed Course Codes

<table>
<thead>
<tr>
<th>Old Code</th>
<th>New Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3101</td>
<td>CHEM 3101K</td>
<td>Analytical Chemistry</td>
<td>4 hours</td>
</tr>
<tr>
<td>CHEM 3201</td>
<td>CHEM 3111K</td>
<td>Instrumental Analysis</td>
<td>4 hours</td>
</tr>
<tr>
<td>CHEM 3401</td>
<td>CHEM 3401K</td>
<td>Physical Chemistry I</td>
<td>4 hours</td>
</tr>
<tr>
<td>CHEM 3411</td>
<td>CHEM 3411K</td>
<td>Physical Chemistry II</td>
<td>4 hours</td>
</tr>
<tr>
<td>CHEM 3522</td>
<td>CHEM 3522L</td>
<td>Advanced Synthesis Laboratory</td>
<td>2 hours</td>
</tr>
<tr>
<td>CHEM 3302</td>
<td>CHEM 3602</td>
<td>Chemical Research</td>
<td>2 hours</td>
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<tr>
<td>CHEM 4101</td>
<td>CHEM 3801</td>
<td>Biochemistry</td>
<td>3 hours</td>
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<tr>
<td>CHEM 4111</td>
<td>CHEM 4801</td>
<td>Advanced Biochemistry</td>
<td>3 hours</td>
</tr>
<tr>
<td>CHEM 4121</td>
<td>CHEM 4201</td>
<td>Advanced Inorganic Chemistry</td>
<td>3 hours</td>
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<tr>
<td>CHEM 4201</td>
<td>CHEM 4532</td>
<td>Medicinal Chemistry</td>
<td>3 hours</td>
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IV. New Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 2601K</td>
<td>Chemistry Research Methods</td>
<td>2 hours</td>
</tr>
<tr>
<td>CHEM 3201K</td>
<td>Inorganic Chemistry</td>
<td>4 hours</td>
</tr>
<tr>
<td>CHEM 4111</td>
<td>Bioanalytical Chemistry</td>
<td>3 hours</td>
</tr>
<tr>
<td>CHEM 4401</td>
<td>Advanced Physical Chemistry</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

V. Other Courses Added to the Curriculum

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 3101</td>
<td>Linear Algebra (ACS Certified degree)</td>
<td>3 hours</td>
</tr>
</tbody>
</table>