Course Inventory Change Request

New Course Proposal

Date Submitted: 01/08/16 1:58 pm

Viewing: CHEM 3300: Instrumental Analysis

Last edit: 01/11/16 12:21 pm

Changes proposed by: d00003473

Catalog Pages referencing this course

Bachelor of Science in Chemistry

<table>
<thead>
<tr>
<th>Course Prefix:</th>
<th>CHEM</th>
<th>Course Number:</th>
<th>3300</th>
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<tbody>
<tr>
<td>Effective Semester:</td>
<td>Spring 2017</td>
<td></td>
<td></td>
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<tr>
<td>Department:</td>
<td>Physical Sciences (PS)</td>
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<tr>
<td>School:</td>
<td>School of Science &amp; Technology</td>
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<tr>
<td>Course Title:</td>
<td>Instrumental Analysis</td>
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<td>Short Course Title:</td>
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<tr>
<td>Credits:</td>
<td>4</td>
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<tr>
<td>Workload Factors:</td>
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</table>
**Primary Grade Type:** Standard Letter  
**Secondary Grade Type:**  
**Instructor Permission Required:** No  
**Repeatable for Credit:** No  
**Schedule Type:** Combined Lecture/Lab  
**Hrs/Wk:** 6  
**Catalog Prerequisites:** Yes  
**Catalog Prerequisites:** CHEM 3000 (Grade C or higher).  
**Grade Required on Prerequisite(s):** C  
**Corequisites:** No  
**Course/Lab Fee:** Yes  

<table>
<thead>
<tr>
<th>Fee Amount</th>
<th>Fee Deposit Index Code</th>
<th>Fee Justification</th>
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<tbody>
<tr>
<td>100</td>
<td>NAT308</td>
<td>Supplies for chemistry lab.</td>
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**Instruction Index Code:** NAT202  
**GE Status Requested:** No

https://newcatalog.dixie.edu/courseleaf/approve/?role=admin
Catalog Description
Focuses on understanding the theory and practice of modern analytical instrumentation. Course emphasis will be placed on chromatography, optical spectroscopy, mass spectrometry, microscopy as well as sample preparation techniques, statistical data treatment, and quality assurance of data.

Course Rotation:
Spring (odd)

Justification for course/change:
This course is a core required course for the Major in Chemistry. As students receive a solid background in analytical chemistry through CHEM 3000 Quantitative Analytical Chemistry, this course is an appropriate ensuing course for students to learn more about the application of modern analytical instrumentation to the identification and quantitation of analytes in samples typically encountered in chemical and allied industries. 3 lecture/3 lab hrs.

Library Resources
Adequate: Yes

Tech Resources
Adequate: Yes

Comparable Courses:
<table>
<thead>
<tr>
<th>Institution</th>
<th>Prefix/Number</th>
<th>Credit(s)</th>
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<tbody>
<tr>
<td>Weber State University</td>
<td>Chem 3050</td>
<td>4</td>
<td>Instrumental Analysis</td>
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<tr>
<td>Utah Valley University</td>
<td>Chem 4000</td>
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<tr>
<td>Southern Utah University</td>
<td>Chem 4230</td>
<td>3</td>
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Course Learning Outcomes:
1. Understand the underlying principles of the measurement by various instruments.
2. Understand data analysis, data manipulation and data interpretation.
3. Design analyses for specific problems with various analytes.
4. Increase students’ ability to communicate effectively and professionally.

Course Reviewer Comments
D00002376 (01/11/16 12:21 pm): added grade notation to the prerequisite statement. Changed Chem to CHEM (all caps), and added a period.