Wilkes University Curriculum Committee

PROPOSAL SUBMITTAL FORM

Directions:

• Use this set of forms for all proposals sent to the Curriculum Committee.
• Pages 1-3 of this document are required. Any unnecessary forms should be deleted from the packet before submissions. If multiple forms are needed (course addition, course deletion, etc), simply copy and paste additional forms into this packet.
• Note that all new programs (majors and minors) and program eliminations must be reviewed and approved by the Provost and APC prior to submission to the Curriculum Committee. Significant program revisions must also undergo review and approval by the Provost. The Provost will determine if a significant proposal revision requires approval by the APC. Revisions to the General Education curriculum originate from the General Education Committee and must be reviewed and approved by the Provost.
• Completed (and signed) forms are due on the first Tuesday of every month. Submit one signed copy to the Chair of the Curriculum Committee.

1. Originator: Name: Amy Bradley
   Department: Chemistry
   Phone and email: ex 4624, amy.bradley@wilkes.edu

2. Proposal Title:

3. Check only one type of proposal: (double click on the appropriate check box and change default value to “checked”).

☐ New Program. (Major or Minor Degree Programs, Certificate Programs). This requires prior review and approval by the Provost and APC.
☐ Elimination of Program. (Major or Minor Degree Programs). This requires prior review and approval by the Provost and APC.
☐ Program Revision. Significant revisions to a program require review and approval by the Provost. The Provost determines if review and approval by APC is necessary.
☐ General Education Revision. Submissions only accepted from the General Education Committee (GEC). Must be reviewed and approved by the Provost.
☐ Creation of new departments, elimination of existing department. This requires prior review and approval by the Provost and APC.
☒ Course additions or deletions not affecting programs (such as elective courses, transition of “topics” courses to permanent courses).
☐ Change in course credit or classroom hours.
☐ Incidental Changes. Includes changes in course/program title, course descriptions, and course prerequisites. (Although these changes do require approval by the Curriculum Committee, they do not go before the full faculty for approval).
☐ Other (Specify)
4. Indicate the number of course modification forms that apply to this proposal:

   X   Course Addition Form (plus syllabi)
   _____ Course Deletion Form
   _____ Course Change Form

5. Executive Summary of Proposal.

   Briefly summarize this proposal. The breadth and depth of this executive summary should reflect the complexity and significance of the proposal. Include an overview of the proposal, background and reasoning behind the proposal and a description of how the proposal relates to the mission and strategic long-range plan of the unit and/or university. For incidental changes a one or two sentence explanation is adequate.

   The School of Nursing requested that a one semester fundamental chemistry course be created to replace the current PHY 170 Physics and Chemistry course that all nursing students are required to take. The School of Nursing would like more chemistry to be covered in this course therefore the move to the chemistry department. Most of the physics topics that need to be covered are also covered in chemistry (gas laws, nuclear chemistry). This course is also needed in order for the nursing students to be able to apply for certain advanced nursing programs in the future (nurse anesthetist programs).

   There will be no change in the number of hours taken by the nursing students as PHY 170 will be deleted from their curriculum. The course will be required during the freshman year instead of the sophomore year. Please see the program outline in section 7 below.

6. Other specific information. (Not applicable for incidental changes.)

   What other programs, if any, will be affected by this proposal? Describe what resources are available for this proposal. Are they adequate? What would be the effect on the curriculum of all potentially affected programs if this proposal were adopted? Include any potential effects to the curriculum of current programs, departments and courses.

   This proposal has been discussed within the nursing and chemistry departments. There is adequate coverage for providing this course in the lecture and laboratory settings (1 new lecture and 2-3 labs). While it adds especially to the work of the chemistry department lab staff, some experiments from the general chemistry course can be used in this lab as well and the lab manager was consulted about the creation of this course. The Physics Department would be affected by the loss of a lecture and 2-3 labs.

7. Program Outline. (Not applicable for incidental changes).

   A semester-by-semester program outline as it would appear in the bulletin for a new program or any modified program with all changes clearly indicated.
<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSG 171 Health Care Term.</td>
<td>1 BIO 113 Microbiology</td>
</tr>
<tr>
<td>BIO 115 Human Anatomy and Physiology I</td>
<td>4 BIO 116 Human Anatomy and Physiology II</td>
</tr>
<tr>
<td>CHM 111 Fund. of Chem.</td>
<td>4 ENG 101 Composition* or</td>
</tr>
<tr>
<td>ENG 101 Composition* or</td>
<td>4</td>
</tr>
<tr>
<td>PSY 101 General Psychology* or SOC 101 Intro. to Sociology* or ANT 101 Intro. to Anthropology*</td>
<td>3 PSY 101 General Psychology* or SOC 101 Intro. to Sociology* or ANT 101 Intro. to Anthropology</td>
</tr>
<tr>
<td>FYF 101 First Year Foundations</td>
<td>3 ANT 102, 212, SOC 251 or 263 Distribution Requirement</td>
</tr>
<tr>
<td><strong>Total Credits</strong>: 15—16</td>
<td><strong>Total Credits</strong>: 17—18</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Third Semester</th>
<th>Fourth Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSG 200 Principles of Normal Nutrition</td>
<td>3 NSG 212 Nursing Care of the Adult Client I</td>
</tr>
<tr>
<td>NSG 210 Principles of Nursing</td>
<td>6 NSG 213 Nursing Care of the Psychiatric Mental Health Client</td>
</tr>
<tr>
<td>NSG 211 Physical Assessment</td>
<td>3 NSG 214 Pathophysiology for the Professional Nurse</td>
</tr>
<tr>
<td>Distribution Requirement</td>
<td>3 EES 242 Environmental Health</td>
</tr>
<tr>
<td><strong>Total Credits</strong>: 15</td>
<td><strong>Total Credits</strong>: 17</td>
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</table>

<table>
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<tr>
<th>Fifth Semester</th>
<th>Sixth Semester</th>
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</thead>
<tbody>
<tr>
<td>NSG 221 Nursing Care of the Adult Client II</td>
<td>4 NSG 226 Nursing Care of the Developing Family</td>
</tr>
<tr>
<td>NSG 223 Nursing Care of the Older Adult Client</td>
<td>4 NSG 227 Nursing Care of the Adult Client III</td>
</tr>
<tr>
<td>MTH 150 Elementary Statistics**</td>
<td>3 Distribution Requirement</td>
</tr>
<tr>
<td>NSG 224 Pharmacotherapeutics and Decision Making in Nursing</td>
<td>3 Total Credits</td>
</tr>
<tr>
<td>PSY Elective</td>
<td>3</td>
</tr>
<tr>
<td>Distribution Requirement</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong>: 17</td>
<td><strong>Total Credits</strong>: 16</td>
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<table>
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<tr>
<th>Seventh Semester</th>
<th>Eighth Semester</th>
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<tbody>
<tr>
<td>NSG 340 Advanced Care Concepts</td>
<td>6 NSG 345 Senior Practicum</td>
</tr>
<tr>
<td>NSG 342 Introduction to Nursing Research</td>
<td>3 NSG 346 Contemporary Issues and Trends in Nursing</td>
</tr>
<tr>
<td>Electives</td>
<td>5 Electives</td>
</tr>
<tr>
<td><strong>Total Credits</strong>: 14</td>
<td><strong>Total Credits</strong>: 14</td>
</tr>
</tbody>
</table>

*Please note: Students must take ENG 101 and both PSY 101 and SOC 101 or ANT 101 during their freshman year.

**Please note: MTH 150 is required and prerequisite to NSG 342.
8. Signatures and Recommendations. (please date)
   • Signatures of involved Department chair(s) and Dean(s) indicate agreement with the proposal and that adequate resources (library, faculty, technology) are available to support proposal.
   • If a potential signatory disagrees with a proposal he/she should write “I disagree with this proposal” and a signed statement should be attached to this submission.

Donald E. Mencer Jr.  
Print Name/Title: Department of Chemistry / chair(s) of all potentially affected programs
Signature: [Signature]  
Date: 12 Mar '15

David R. Curry  
Print Name/Title: Department of Electrical Engineering & Physics / chair(s) of all potentially affected programs
Signature: [Signature]  
Date: 12 Mar '15

Deborah Zbegner  
Print Name/Title: School of Nursing Dean (s) of any potentially affected College/School.
Signature: [Signature]  
Date: 3/12/15

Teres e M. Wignot  
Print Name/Title: College of Science & Engineering Dean (s) of any potentially affected College/School.
Signature: [Signature]  
Date: 3/12/15

Joseph M. Kuits  
Print Name: Registrar
Signature: [Signature]  
Date: 03/12/15

Provo st (For new programs, program elimination, significant program revisions and revisions to the General Education curriculum).

Provo st should check here _____ if this proposal is a program revision AND the significance of the revision requires review and approval by APC prior to Curriculum Committee.

Chair, Academic Planning Committee. For new programs, program elimination, and significant program revisions sent via the provost. Signature indicates that the proposal has been reviewed and approved by APC.

Chair, General Education Committee. For revisions to General Education curriculum only. (Signature indicates that the proposal has been approved by GEC).
Wilkes University Curriculum Committee
COURSE ADDITION FORM

1. Course Title: Official title for course – as opposed to the popular title
   Fundamentals of Chemistry

2. Course Number: ___CHM_111____________________
   Coordinate with Registrar to insure course number is available

3. Total Course Credit Hours: ___4____
   Classroom Hours ___4____
   Lab Hours ___2____
   Other ______

4. Course Prerequisites: High school chemistry

5. Course Description (as proposed for the Bulletin): Course descriptions provide an overview of the topics covered. If the course is offered on a scheduled basis, i.e. every other year, or only during a set semester, note this in the description. Course descriptions should be no more than two to three sentences in length.

   Designed for students who do not intend to major in science or engineering, this one-semester course presents principles of chemistry. Topics include atomic structure, chemical bonding, gas laws, solutions, acid/base chemistry and an introduction to organic and biochemistry. A laboratory component closely coordinated with and designed to accompany the lecture is required as part of this course. Experiments develop basic principles of laboratory technique. Students may not receive credit for both CHM 111 and CHM 113/115. Offered during fall semesters only.

6. Required Documentation:
   Proposed Syllabus Attach proposed syllabus immediately after this document. In some situations the official syllabus may contain information which is beyond the review needs of the Curriculum Committee (such as extensive rubrics, etc). It is permissible to attach an abbreviated syllabus. In general, syllabi (whether full or abbreviated) should contain the following information: Course Title, Course Number, Credit hours, Faculty Information (name contact information, office hours), Course Description, Course Outcomes or Objectives, Assessment (grading) informations, required texts (or other things such as tools, software, etc), pertinent policies and a proposed schedule of topics.

*See Below
FUNDAMENTALS OF CHEMISTRY
Fall 2015

Amy L. Bradley, Ph.D.
217 Cohen Science Center
Department of Chemistry
570-408-4624
amy.bradley@wilkes.edu

Lecture:

Office Hours:


Exams/Homework
There will be three exams and a comprehensive final exam. All exams are mandatory and no makeup exams will be given without a documented, valid excuse. In addition, there will be recommended homework problems from the text to practice problem solving. These problems will NOT be graded but similar problems may appear on the tests.

Attendance Policy
Attendance in lecture is not required but recommended.

Laboratory
One component (25%) of this course is in the laboratory. Experiments will be performed that enhance the material covered in lecture. Attendance is mandatory. Lab reports must be turned in or attendance in lab will not count. Late reports are subject to a 10% per day late penalty.

Drops
Drop slips will NOT be signed after the drop date without a valid, documented excuse. Please do not ask. There are no exceptions. This is a university policy. Students withdrawing from the lecture must also withdraw from the laboratory.

Cheating
Cheating is taken very seriously. Anyone caught cheating on an exam will get a zero on that exam. It WILL be reported to the Student Affairs office.

Grades

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<tr>
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<tbody>
<tr>
<td>Exams</td>
<td>3 x 20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>15%</td>
</tr>
<tr>
<td>Laboratory</td>
<td>25%</td>
</tr>
</tbody>
</table>

4.0 = 90-100%
3.5 = 85-89%
3.0 = 80-84%
2.5 = 75-79%
2.0 = 70-74%
1.5 = 65-69%
1.0 = 60-64%
0 = < 60
Course Objectives

Students in all chemistry courses are expected:

A1. To demonstrate proficiency in analysis, organization, interpretation, and presentation of chemical data.

A2. To express chemical concepts with quantitative relationships and to interpret the results obtained from use of these quantitative relationships in terms of the chemical concepts conveyed in this format.

A3. To use written communication in a cogent and coherent form that demonstrates understanding of chemical concepts.

A4. To develop critical thinking and problem-solving skills in synthesizing information.

A5. To appreciate the relevance of chemistry to everyday life.

A6. To recognize that the various areas of chemistry are interrelated and require integration of basic chemical principles, including chemical formulae and nomenclature, chemical reactions and stoichiometry, chemical equilibria and acid-base theory, and molecular structure.

In addition, students successfully completing the fundamentals of chemistry course are expected to develop skills in and an appreciation of:

B1. Develop critical problem solving and quantitative reasoning.

B2. To effectively apply dimensional analysis to solve chemical problems

B3. To develop basic skills and knowledge of chemistry and how to apply them to the world around you.

B4. The importance of chemistry in biological systems and pharmaceuticals.

Workload/Study Hints

1. You should spend part of EVERY day studying chemistry. This will make it much more manageable. If you only study a couple of days before the exam then you will not do well. You must keep up!

2. I strongly recommend that you read the chapter to be covered in lecture prior to the lecture on that material.

3. Work as many problems in the text and at the end of the chapter as you can without referring to the solutions.

4. If you need help please come and see me early. There are tutors, study sessions etc. that can help.
**Schedule of Topics**

Chapter 1-What is Chemistry?  
Problems-22, 23, 26, 28, 30, 36, 38, 46, 48, 50

Chapter 2-The Numerical Side of Chemistry  
Problems-30, 31, 33, 35, 39, 41, 42, 47, 49, 50, 51

Chapter 3-The Evolution of Atomic Theory  
Problems- 33, 37, 41, 43, 44

Chapter 4-The Modern Model of the Atom  
Problems-28, 29, 34, 36, 37, 38, 39, 40, 41, 44, 47, 51, 52, 58

**Exam 1- Chapters 1-4**

Chapter 5-Chemical Bonding and Nomenclature  
Problems-43, 44, 45, 46, 47, 49, 50, 51, 56, 57, 58, 59, 68, 69, 70, 72

Chapter 6-The Shape of Molecules  
Problems-44, 45, 50, 51, 52, 53, 54, 56, 60, 61, 66, 69, 71, 75, 77, 78, 79

Chapter 7-Intermolecular Forces and the Phases of Matter  
Problems-39, 41, 48, 49, 50, 52, 54, 55, 73

Chapter 8- Chemical Reactions  
Problems-60, 61, 63, 71, 73, 83, 86, 87, 89, 94

**Exam 2- Chapters 5-8**

Chapter 9-Stoichiometry and the Mole  
Problems-41, 42, 43, 44, 45, 49, 51, 57, 59, 62, 70, 72

Chapter 11- The Ideal Gas  
Problems-

Chapter 12-Solutions  
Problems-

Chapter 15-Electrolytes, Acids, and Bases  
Problems-

**Exam 3- Chapters 9, 11, 12, 15**
Chapter 16-Nuclear Chemistry
Problems-

Chapter 17-Organic Chemistry
Problems-

Chapter 18-Biochemistry
Problems-

Comprehensive Final Exam- as scheduled

Lab Schedule
Week 1- Measurements/Accuracy and Precision
Week 2- Molecular Modelling Using Spartan
Week 3-Using Density to Determine Sugar Concentrations
Week 4- Using Gas Laws to Determine Molecular Weight
Week 5- Freezing Point Depression of Various Liquids
Week 6- Vitamin C Titration
Week 7- Determining pH 3 different ways
Week 8- TLC of Analgesics
Week 9-Synthesis of Aspirin
Week 10-Biochemistry
Wilkes University Curriculum Committee
COURSE DELETION FORM

1. Course Title: Concepts in Physics and Chemistry

2. Course Number: PHY170

3. Course Credit Hours: 4 hours

   Total Course Credit Hours: 4

   Classroom Hours: 4
   Lab Hours: 2
   Other: ________

4. Effective date of course deletion (semester/year)

   fall 2015

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