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), program eliminations, significant program revisions and all general education core revisions must be reviewed and approved by the Provost and Academic Planning Committee (APC) prior to submission to the Curriculum Committee. The Provost will make the decision if a program revision requires APC review.
- Completed and signed forms are due no later than the second Tuesday of every month. Submit one signed original hard copy and a scanned electronic copy with all signatures to the Chair of the Curriculum Committee.

1. Originator: Donald Mencer
   Department of Chemistry
   Phone and email: x-4626 / mencer@wilkes.edu

2. Proposal Title: Approval of CHM111 for General Education (Area II)

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). 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:

___1___ 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 Chemistry Department would like to add CHM111 (an approved course listed in the Bulletin) as
   an approved “General Education Courses Which Satisfy the Core Requirements And Are Required
   For Graduation” in Area II, The Scientific World. The Chemistry Department already has two other
   100 level Chemistry offerings that are approved as such: CHM105 (a 3 Credit lecture only non-
   science major course) and CHM115/113 (the 3 credit lecture + 1 credit lab courses taken by science
   majors).

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.

   CHM111 course is a 4 credit (lecture plus lab) taken by nursing students as a requirement for their
   program. This course was developed in AY 2014-2015 when the then interim-Dean (Dr. Zbegner)
   contacted out Department to develop a course for their program. The course was developed and a
   proposal to add the course to the University curriculum passed through the Curriculum Committee
   and the Full Faculty. The course description has been added to the University Bulletin. Fall of 2015
   the course is being taken by two student cohorts: one principally freshmen (81 students) and the
   second principally sophomores (49 students).

   Adding this course to the list of “General Education Courses Which Satisfy the Core Requirements
   And Are Required For Graduation” in Area II, The Scientific World will permit the students enrolled
   in this course to satisfy the requirement for at least one (1) of the two (2) courses (in Area II) must
   contain a laboratory component. The faculty of our Department believes the course to be suitable for
   this purpose as it was designed to incorporate components that address the Student Learning
   Outcomes (SLO) for Area II.

   The course could ultimately be taken by others in order to satisfy the Area II requirement that at least
   one (1) of the two (2) courses (in Area II) must contain a laboratory component. However, in this
   first year of the offering enrollment was restricted to Nursing majors in order to ensure that the
   students in that population could complete the course as part of their major (program) requirements.
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.

Please refer to the proposal submitted and passed in AY 2014-2015 (attached).

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.

[Signatures and dates of department chairs, dean, and provost]

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

Provost 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

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- 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 program 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>
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<tbody>
<tr>
<td>NSG 171 Health Care Term.</td>
<td>BIO 113 Microbiology</td>
</tr>
<tr>
<td>BID 115 Human Anatomy and Physiology I</td>
<td>BIO 116 Human Anatomy and Physiology II</td>
</tr>
<tr>
<td>CHM 111 Fund of Chem.</td>
<td>ENG 101 Composition* or</td>
</tr>
<tr>
<td>ENG 101 Composition* or</td>
<td>4</td>
</tr>
<tr>
<td>PSY 101 General Psychology* or</td>
<td>ENG 101 Composition* or</td>
</tr>
<tr>
<td>SOC 101 Intro to Sociology* or ANT 101 Intro. to Anthropology*</td>
<td>4</td>
</tr>
<tr>
<td>FYP 101 First Year Foundations</td>
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<td><strong>Total Credits</strong></td>
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<tr>
<th>Third Semester</th>
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<tbody>
<tr>
<td>NSG 208 Principles of Normal Nutrition</td>
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<tr>
<td>NSG 310 Principles of Nursing</td>
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<tr>
<td>NSG 211 Physical Assessment</td>
</tr>
<tr>
<td>Distribution Requirement</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<th>Fourth Semester</th>
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<tbody>
<tr>
<td>NSG 212 Nursing Care of the Adult Client I</td>
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<td>NSG 213 Nursing Care of the Psychiatric Mental Health Client</td>
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<tr>
<td>NSG 214 Pathophysiology for the Professional Nurse</td>
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<td>EIS 242 Environment of Health</td>
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<th>Fifth Semester</th>
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<tbody>
<tr>
<td>NSG 221 Nursing Care of the Adult Client II</td>
</tr>
<tr>
<td>NSG 222 Nursing Care of the Older Adult Client</td>
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<tr>
<td>MTH 150 Elementary Statistics**</td>
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<tr>
<td>NSG 224 Pharmacotherapeutics and Decision-Making in Nursing</td>
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<tr>
<td>PSY Elective</td>
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<tr>
<td>Distribution Requirement</td>
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<tr>
<td><strong>Total Credits</strong></td>
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<tr>
<th>Sixth Semester</th>
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<tbody>
<tr>
<td>NSG 228 Nursing Care of the Developing Family</td>
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<td>NSG 227 Nursing Care of the Adult Client III</td>
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<td>Distribution Requirement</td>
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<td><strong>Total Credits</strong></td>
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<th>Seventh Semester</th>
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<tbody>
<tr>
<td>NSG 340 Advanced Care Concepts</td>
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<tr>
<td>NSG 342 Introduction to Nursing Research</td>
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<tr>
<td>Electives</td>
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<td><strong>Total Credits</strong></td>
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<th>Eighth Semester</th>
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<tbody>
<tr>
<td>NSG 345 Senior Practicum</td>
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<tr>
<td>NSG 346 Contemporary Issues and Trends in Nursing</td>
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<tr>
<td>Electives</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
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<td>8</td>
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</table>

*Please note: Students must take ENG 101 and both PSY 101 and SOC 101 or ANT 101 during their first 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. Donald E. Mencer 12 Mar '15
Print Name/Title Signature Date

Department of Chemistry / chair(s) of all potentially affected programs

David R. Canby 12 Mar '15
Print Name/Title Signature Date

Department of Electrical Engineering & Physics / chair(s) of all potentially affected programs

Deborah Zagarac Donald Hyman 3/12/15
Print Name/Title Signature Date

School of Nursing Dean (s) of any potentially affected College/School.

Teres M. Wignot 3/12/15
Print Name/Title Signature Date

College of Science & Engineering Dean (s) of any potentially affected College/School.

Joseph M. Kuttis 03/12/15
Print Name/Title Signature Date

Registrar

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

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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

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

<table>
<thead>
<tr>
<th></th>
<th>3 x 20%</th>
<th>4.0 = 90-100%</th>
<th>2.0 = 70-74%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams</td>
<td>15%</td>
<td>3.5 = 85-89%</td>
<td>1.5 = 65-69%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
<td>3.0 = 80-84%</td>
<td>1.0 = 60-64%</td>
</tr>
<tr>
<td>Laboratory</td>
<td></td>
<td>2.5 = 75-79%</td>
<td>0 = &lt; 60</td>
</tr>
</tbody>
</table>
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