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: Name Amy Bradley
   Department Chemistry
   Phone and email 570-408-4624 amy.bradley@wilkes.edu

2. Proposal Title: Essentials of Organic Chemistry

3. Check only one type of proposal: (double click on the appropriate check box and change default value to “checked”). Each different type of proposal must be submitted on a separate form.
   - ☐ New Program. (Major or Minor Degree Programs). This requires prior review and approval by the Provost and APC. Major = minimum of 30 credits, minor = minimum of 18 credits.
   - ☐ New Concentration, Track, or Certificate. The Provost determines if review and approval by APC is necessary. Concentration – minimum of 12 credits, certification, endorsement and track are discipline specific.
   - ☐ Elimination of Program. (Major or Minor Degree Programs). This requires prior review and approval by the Provost and APC.
   - ☐ Elimination of Concentration, Track, or Certificate. The Provost determines if review and approval by APC is necessary.
   - ☐ 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)

Indicate the number of course modification forms that apply to this proposal:

   _____ Course Addition Form (Attach Syllabi: refer to Faculty Handbook for requirements)
   _____ Course Deletion Form
   _____ Course Change Form

Revised 4/30/2018
4. **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.

A one semester Organic Chemistry course was requested by the departments of Biology and Pharmacy. Neuroscience majors also only take one semester of organic chemistry and, with the current two-semester sequence, were only getting first semester topics, even though the second-semester topics are more relevant to biological systems. The Essentials of Organic Chemistry course includes topics from both semesters of organic chemistry that are relevant to biological and medical systems. This course was run as a pilot during the fall of 2018.

5. **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.

Since the two semester organic chemistry sequence will remain in place this proposal does not obligatorily affect any department. The effect on any program that choses to allow their students to take this course would be to reduce their credit hours by 3. The pharmacy and biology programs are aware of this 3 credit hour reduction and will have these hours “made up” by requiring different coursework for their students.

6. **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.

7. **New Program Assessments:** (For new programs ONLY)

   All new major programs reviewed through the Curriculum Committee must complete this section. Please consult the following page for guidance in developing an assessment plan:  [https://wilkes.edu/about-wilkes/university-committees/assessment/assessment-planning.aspx](https://wilkes.edu/about-wilkes/university-committees/assessment/assessment-planning.aspx)

   a. Please list program-level student learning outcomes (SLOs) that all program majors should be able to demonstrate upon graduation from the program. SLOs should be worded such that student performance can be measured directly.

   b. Please briefly describe current plans for how student performance on each program-level SLO will be assessed. Be sure to answer *where* (which courses), *when* (frequency), and *how* (assessment method) for each SLO.

   c. Please identify by name any external accreditation agency or agencies that will influence assessment planning. Include standards or requirements from that accreditor that must be
followed when developing the program’s assessment plan. You are encouraged to share specific, current web links to relevant content when standards or requirements related to assessment are substantial.

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.

   Amy Bradley / Co-Chair Chemistry  Amy Mulley  1/30/19
   Print Name/Title  Signature  Date
   Department chair(s) of all potentially affected programs

   PRAHLAD MURTHY / Interim Dean  2-1-19
   Print Name/Title  Signature  Date
   Dean(s) of any potentially affected College/School.

   Susan Hritzak  2-1-19
   Print Name/Title  Signature  Date
   Registrar

   Anne A. Sheehan  3/5/19
   Print Name/Title  Signature  Date
   Provost (For new programs, significant revisions and revisions to the General Education Program revisions only).
   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.

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

   Print Name  Signature  Date
   Chair, General Education Committee. For revisions to General Education program only.
   (Signature indicates that the proposal has been approved by GEC).

Revised 4/17/2018
Wilkes University Curriculum Committee
COURSE ADDITION FORM – page 1

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

2. Course Number: ____CHM 235____________________
   Coordinate with Registrar to insure course number is available

3. Course Credits: __3___
   Classroom Hours__4__ Lab Hours_____ Other_____

4. Course Pre-requisites: A grade of 2.0 or better in CHM 114/116

5. Course Co-requisites: CHM 237 Essentials of Organic Chemistry Lab

6. Effective Date of Addition (semester/year) _Fall/2019____________________

7. Course Description (as proposed for the Bulletin): A one semester course covering the fundamentals of carbon chemistry. Nomenclature, stereochemistry, functional groups, spectroscopy, and reactions and mechanisms of alcohols, ethers, amines, alkyl halides, carbonyl compounds, and benzene are covered.

8. Required Documentation:
   Proposed Syllabus Attach proposed syllabi 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.
ESSENTIALS OF ORGANIC CHEMISTRY 298
Spring 2019

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

Lecture: MWF 12:00-12:50 SLC 222
T. 10:00-10:50 am SLC 222

Office Hours: WR 1-3 pm or by appointment

Text: Essential Organic Chemistry 3rd edition by Bruice; Pearson, 2016. The solutions manual will be on reserve in the library. A set of molecular models is also highly recommended.

Exams/Homework/Quizzes
There will be 4 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. Random quizzes will be given at the beginning of class. The lowest quiz grade will be dropped. There will be NO make-up quizzes. Quizzes will be given at the beginning of class so if you are late you may miss the quiz.

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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<tbody>
<tr>
<td>Exams</td>
<td>4 x 15%</td>
<td>4.0 = 90 – 100%</td>
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<td>2.0 = 70 – 75%</td>
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<td>Quizzes</td>
<td>10%</td>
<td>3.5 = 86 – 89%</td>
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<td>1.5 = 66 – 65 %</td>
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<td>Final Exam</td>
<td>30%</td>
<td>3.0 = 80 – 85%</td>
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<td>1.0 = 60 – 65 %</td>
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<td>2.5 = 76 – 79%</td>
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<td>0 = &lt;60%</td>
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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 organic sequence are expected to develop skills in and an appreciation of:

B2. Sources of molecular stability and instability, and their effect on reaction thermodynamics and kinetics.
B3. Stereochemistry and its importance in biological systems and pharmaceuticals.
B4. The use of spectroscopy in structure determination.

Workload/Study Hints

1. You should spend part of EVERY day studying organic 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 manual. (This will help you on the quizzes)
4. We will be covering a lot of different reactions during this semester. I strongly recommend that you make up a set of 4x6 flashcards, one for each reaction or mechanism.
5. All work is cumulative. What you learn one day you will see at the end of the month, and semester. Try to LEARN not memorize and you will do much better.
Schedule of Topics

Chapter 1 - Remembering General Chemistry: Electronic Structure and Bonding
Problems: 37, 38, 39, 44, 45, 49, 52, 54, 55, 61, 63

Chapter 2 - Acids and Bases: Central to Understanding Organic Chemistry
Problems: 38, 39, 40, 43, 46, 48, 51, 52, 53

Chapter 3 - An Introduction to Organic Compounds
Problems: 39, 40, 41, 42, 44, 45, 47, 48, 49, 50, 52, 56, 57, 62, 65, 66

Chapter 4 - Isomers: The Arrangement of Atoms in Space
Problems: 44, 46, 48, 49, 50, 54, 55, 58, 59, 60, 62, 66, 69

Exam 1 - Chapters 1, 2, 3, 4

Chapter 10 - Determining the Structure of Organic Compounds (only IR and NMR)
Problems: 65, 66, 67, 75, 76

Chapter 5- Alkenes
Problems: 21, 22, 24, 27, 28, 29, 30, 33, 35, 37,

Chapter 6- The Reactions of Alkenes and Alkynes
Problems: 29, 30, 31, 33, 34, 35, 37, 38, 44, 45, 47, 49, 52, 56, 60, 62

Exam 2- Chapters 10, 5, 6

Chapter 7- Delocalized Electrons and Their Effects, Aromaticity and the Reactions of Benzene
Problems: 31, 32, 33, 34, 35, 38, 41, 42, 43, 45, 47, 48, 50, 51, 57, 58, 62

Chapter 8- Substitution and Elimination Reactions of Alkyl Halides
Problems: 31, 33, 36, 39, 42, 44, 47, 49, 52, 53, 57, 59, 59, 61

Chapter 9- Reactions of Alcohols, Ethers, Epoxides, Amines, and Thiols
Problems: 26, 27, 28, 29, 31, 36, 39, 46, 48, 49, 55, 58

Exam 3- Chapters 7, 8, 9

Chapter 11- Reactions of Carboxylic Acids and Derivatives
Problems: 31, 32, 35, 44, 49, 50

Chapter 12- Reactions of Aldehydes and Ketones
Problems: 28, 29, 31, 33, 36, 39, 44, 52
Chapter 13- Reactions at the alpha Carbon of Carbonyl Compounds
Problem: 24, 25, 28, 43, 45, 50

Exam 4- Chapters 11, 12, 13

Chapter 14-Radicals
Problems: 12, 14

Comprehensive Final Exam as scheduled