AGENDA Faculty Senate Meeting September 24, 2024 – 3:45 pm, Lowrimore Auditorium

- I. Call to order
- II. Approval of Minutes from the April 18, 2024 meeting
- **III.** Report from the Executive Committee
- IV. Report from the Academic Affairs Committee (See the attachment for complete proposals. See the appendix for supporting materials).
 - 1. Proposal from the Department of Chemistry
 - A. Modify Chemistry Major requirements
 - B. Modify Forensic Science Option in Chemistry requirements
 - C. Modify Pre-Pharmacy Option in Chemistry requirements
- V. Report from the Graduate Council (See the attachment for complete proposals. See the appendix for supporting materials).

There were no proposals sent forth from the GC for this meeting.

- VI. Old Business
- VII. New Business
- VIII. Announcements
- IX. Adjournment

Attachment to the Faculty Senate Agenda – September 24, 2024

- IV. Report from the Academic Affairs Committee
 - 1. Proposal from the Department of Chemistry
 - **A.** <u>MODIFY</u> on page 80 of the current catalog the course options under chemistry and other requirements for a traditional **Chemistry Major**

FROM:

Major

General Education Requirements	48-50 hours
Communications	9-10 hours
English 101 (or English 101E/L), 102	6 or 7
Speech Communications 101	3
Social Sciences	
Political Science 101 or 103	3
Social Science Electives (2)	6
Humanities	12 hours
Literature	3
History	3
Art 101, Music 101, or Theater 101	3
Humanities Elective	3
Mathematics	6-7 hours
Mathematics 111 or 111E/L, 132 or higher	6 or 7
Natural Sciences	
Biology	4
Chemistry 111/111L	4
Chemistry 112/112L	
Chemistry Requirements	28 hours
Chemistry 201	4
Chemistry 202	4
Chemistry 203	4
Chemistry 301	4
Chemistry 302	4
Chemistry 303	4
Chemistry 402	
Chemistry 499	
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Other Requirements	17 hours
Mathematics 201	
Mathematics 202	3
Mathematics 203, 301, 304 or 306	
Physics 201	
Physics 202	
Minor/Collateral & Free Electives	25-27 hours
Minimum Hours Required for Graduation	120 hours
<u>TO:</u>	
Major	
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General Education Requirements	
Communications	
English 101 (or English 101E/L), 102	6 or /

Speech Communications 101	
Social Sciences	
Political Science 101 or 103	
Social Science Electives (2)	
Humanities	12 hours
Literature	3
History	3
Art 101, Music 101, or Theater 101	3
Humanities Elective	3
Mathematics	6-7 hours
Mathematics 111 or 111E/L, 132 or higher	6 or 7
Natural Sciences	12 hours
Biology	4
Chemistry 111/111L	4
Chemistry 112/112L	4
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Chemistry Requirements	28 hours
Chemistry 201	4
Chemistry 202	4
Chemistry 203	4
Chemistry 301	4
Chemistry 302, 403, 404, 405, 407, 408, 497, 498*	
Chemistry 303 or 313	
Chemistry 402	3
Chemistry 499	1
*A minimum of four hours must be selected from the courses listed.	
Other Requirements	17 hours
Mathematics 201	3
Mathematics 202	3
Mathematics 203, 301, 304, 306, 310, or 312	
Physics 201	
Physics 202	
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Minor/Collateral & Free Electives	25-27 hours
Minimum Hours Required for Graduation	120 hours

Rationale: These changes increase the flexibility of courses that can be taken to complete a traditional Chemistry major. As currently written, the courses allowed for a major are restrictive and would exclude the likelihood that students would take several other suitable upper-level chemistry courses, most of which offered for the ACS certified degree. This added flexibility should benefit both the department and the students. Due to the small number of chemistry majors, this will allow course substitutions particularly in the event that a course currently required can't be offered due to low enrollment or is only offered every other year. Appropriate options for upper-level Math courses have also been added as the additional courses would also provide more flexibility for the Chemistry degree math requirements.

The first modification gives the student the choice of taking Chem 302 (Physical Chemistry II, 4 hrs) or some combination of the following upper level courses to obtain the needed minimum of 4 credit hours: Chem 403 (Advanced Synthesis & Characterization, 2 hrs), Chem 404 (Biochemistry, 3 hrs), Chem 405 (Advanced Organic, 3 hrs), Chem 407 (Intro to Polymer Science, 3 hrs), Chem 408 (Biochemistry II, 3 hrs), Chem 497 (Special Studies, 1 hr), and Chem 498 (Chemistry Internship, 1hr).

The second modification gives the student the choice of taking Chem 303 (Instrumental Analysis) or Chem 313 (Environmental Chemistry). Both of these courses rely heavily on the use of instrumentation to identify and measure analytes. This will also help the department because it is unlikely that we will be able to offer both courses in the same year.

The third modification includes Math 310 (Mathematical Models & Applications) and Math 312 (Probability & Statistics for Science & Math) as additional options to complete the math requirements for the Chemistry degree.

These changes do not change any minimum hour requirements for the major.

B. <u>MODIFY</u> on page 81 of the current catalog the course options under the **Forensic** Science Option in Chemistry

FROM:

Forensic Science Option in Chemistry

General Education Requirements
Communications
English 101 (or English 101E/L)
English 102
Speech Communications 101
Social Sciences
Political Science 101 or 103
Political Science 230
Sociology 201
Humanities
Literature
History
Art 101, Music 101, or Theater 101
Humanities Elective
Mathematics
Mathematics 132 or 137 or higher
Mathematics 134
Natural Sciences
Biology 105 and 115 or 107
Biology 106 or 108
Chemistry 111 and 111L

Forensic Science Curriculum	38 hours
Chemistry 404	
Chemistry 497 (Research in Forensics)	
Chemistry 204 (Essential Forensic Chemistry)	
Sociology 341 (Criminology)	
Sociology Course selected FROM 342, 343, 344, or 347	
Political Science Course selected FROM 206, 330, or 331	
Physics 201 and 202	
Mathematics 201	
Mathematics 202	
Mathematics 203	
Biology 205	4
Chemistry Requirements	28 hours
Chemistry 112 and 112L	
Chemistry 201	
Chemistry 202	
Chemistry 203	
Chemistry 301	
Chemistry 303	
Chemistry 499	
Upper-level Chemistry: One course from 300 or 400-level	
Chemistry 302, 313, 402, 405, 407, or 408	3 or 4
Free Electives	6 hours
Total Hours Required for Graduation	120 122 hour
Total Hours Required for Graduation	
TO:	
<u>10:</u>	
Forensic Science Option in Chemistry	
General Education Requirements	
Communications	
English 101 (or English 101E/L)	3 or 4
English 102	
Speech Communications 101	
Social Sciences	
Political Science 101 or 103	
Political Science 230	
Sociology 201	
Humanities	
Literature	
History	
Art 101, Music 101, or Theater 101	
Humanities Elective	
Mathematics	
Mathematics 132 or 137 or higher	

Mathematics 134	3
Natural Sciences	12 hours
Biology 105 and 115 or 107	4
Biology 106 or 108	4
Chemistry 111 and 111L	
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Forensic Science Curriculum	38 hours
Chemistry 404	3
Chemistry 497 (Research in Forensics)	1
Chemistry 204 (Essential Forensic Chemistry)	
Sociology 210 (Introduction to Crime Studies)	
Sociology Course selected FROM 341, 342, 343, 344, or 347	
Political Science Course selected FROM 206, 346, or 347	
Physics 201 and 202	
Mathematics 201	
Mathematics 202	3
Mathematics 203, 301, 304, 306, 310, or 312	
Biology 205	
Chemistry Requirements	28 hours
Chemistry 112 and 112L	
Chemistry 201	
Chemistry 202	
Chemistry 203	
Chemistry 301	
Chemistry 303 or 313	
Chemistry 499	1
Upper-level Chemistry: One course from 300 or 400-level	
Chemistry 302, 402, 403, 405, 407, 408, 497, 498*	3 or 4
*A minimum of 3 hours must be selected from these courses.	
Free Electives	6 hours
Total Hours Required for Graduation	20 - 122 hour

Rationale: These changes increase the flexibility of courses that can be taken to complete the Forensic Science Option in Chemistry. As currently written, the chemistry courses allowed for this option are restrictive and would exclude the likelihood that students would take several other suitable upper-level chemistry courses most of which offered for the ACS certified degree. This added flexibility should benefit both the department and the students. Due to the small number of chemistry majors, this will allow course substitutions particularly in the event that a course currently required can't be offered due to low enrollment or is only offered every other year. Appropriate options for upper-level Math courses have also been added as the additional courses would also provide more flexibility for the Forensic Option math requirements. Changes in the Sociology and Political Science courses reflect changes made in those departments.

The first modification changes Sociology 341(Criminology) to Sociology 210 (Introduction to Crime Studies). The Department of Sociology is updating the course content of Sociology 341 as a result of the creation of Sociology 210 for the new Criminal Justice degree. Based on those changes, the lower-level course (Sociology 210) will provide the relevant content for those in the Forensic Science Option in Chemistry. These changes are being made in consultation with the Sociology Department.

The second modification moves Sociology 341 to be included as an option for the second required Sociology course.

The third modification changes the course numbers for Political Science 330 or 331 to Political Science 346 (Criminal Justice and Public Policy) or 347 (Politics of Crime and Justice). Political Science 330 and 331 are no longer listed in the course catalog and were replaced with 346 and 347.

The fourth modification gives additional options to complete the math requirements with the addition of four 300-level math courses rather than just Math 203. These include Math 301 (Ordinary Differential Equations), Math 304 (Linear Algebra), Math 306 (Multivariable Calculus), Math 310 (Mathematical Models & Applications) and Math 312 (Probability & Statistics for Science & Mathematics).

The fifth modification gives the student the choice of taking Chem 303 (Instrumental Analysis) or Chem 313 (Environmental Chemistry). Both of these courses rely heavily on the use of instrumentation to identify and measure analytes. This will also help the department because it is unlikely that we will be able to offer both courses in the same year.

The sixth modification gives additional options for the upper-level chemistry credits under the chemistry requirements. The added courses are Chem 403 (Advanced Synthesis & Characterization, 2 hrs), Chem 497 (Special Studies, 1 hr) and Chem 498 (Chemistry Internship, 1hr). A minimum of 3 credit hours are required. Chem 313 is removed from this list because of the fifth modification.

These changes do not change any minimum hour requirements for the major.

C. <u>MODIFY</u>, on page 81 and 82 of the current catalog, the course options for the **Pre-Pharmacy Option in Chemistry**

FROM:

Pre-Pharmacy Option in Chemistry

General Education Requirements	. 48/49 hours
Communications	9/10 hours
English 101 (or English 101E/L), 102	6/7
Speech Communications 101	3

Social Sciences	
Political Science 101 or 103	3
Economics 204	3
Social Science Elective	3
Humanities	2 hours
Literature 250	3
History	3
Art 101, Music 101, or Theater 101	3
Humanities Elective	
Mathematics	
Mathematics 132 or 137	3
Mathematics 134	3
Natural Sciences	
Biology 105,115	
Psychology 206, 216	
Chemistry 111 and 111L	
Chemistry 111 and 1112	
Pre-Pharmacy Requirements	48 hours
Chemistry 112 and 112L	
Chemistry 201	
Chemistry 202	
Chemistry 404	
Biology 106	
e:	
Biology 205	
Biology 406	
Biology 215 or 311	
Physics 201, 202	
Mathematics 201	
Mathematics 202	
Mathematics 203	3
Chemistry Requirements	20 hours
Chemistry Requirements Chemistry 203	
Chemistry 301	
Chemistry 302 Chemistry 302	
Chemistry 303	
Chemistry 402	
Chemistry 499	1
Free Electives	4 hours
Total Hours Required for Graduation	/121 hours
<u>TO:</u>	
Pre-Pharmacy Option in Chemistry	
General Education Requirements	hours

Communications	
English 101 (or English 101E/L), 102	
Speech Communications 101	
Social Sciences	
Political Science 101 or 103	3
Economics 204	
Social Science Elective	3
Humanities	12 hours
Literature 250	3
History	
Art 101, Music 101, or Theater 101	
Humanities Elective	3
Mathematics	
Mathematics 132 or 137	3
Mathematics 134	3
Natural Sciences	12 hours
Biology 105,115	4
Psychology 206, 216	
Chemistry 111 and 111L	4
Pre-Pharmacy Requirements	48 hours
Chemistry 112 and 112L	
Chemistry 201	
Chemistry 202	
Chemistry 404	
Biology 106	
Biology 205	
Biology 406	
Biology 215 or 311	
Physics 201, 202	
Mathematics 201	
Mathematics 202	
Mathematics 203, 301, 304, 306, 310, or 312	
Chemistry Requirements	20 hours
Chemistry 203	
Chemistry 301	
Chemistry 302, 403, 405, 407, 408, 497, 498*	4
Chemistry 303 or 313	
Chemistry 402	
Chemistry 499	
*A minimum of 4 hours must be selected from these courses.	
Free Electives	4 hours
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Total Hours Required for Graduation	120/121 hours

<u>Rationale</u>: These changes increase the flexibility of courses that can be taken to complete a Pre-Pharmacy Option in Chemistry. As currently written, the courses allowed for the option are restrictive and would exclude the likelihood that students would take

several other suitable upper-level chemistry courses most of which offered for the ACS certified degree. This added flexibility should benefit both the department and the students. Due to the small number of chemistry majors, this will allow course substitutions particularly in the event that a course currently required can't be offered due to low enrollment or is only offered every other year. Appropriate options for upper-level Math courses have also been added as the additional courses would also provide more flexibility for the math requirements for this option.

The first modification adds Math 310 (Mathematical Models & Applications) and Math 312 (Probability & Statistics for Science & Math) as additional options to complete the math requirements for the Pre-Pharmacy degree.

The second modification gives the student the choice of taking Chem 302 (Physical Chemistry II, 4 hrs) or some combination of the following upper level courses to obtain the needed minimum of 4 credit hours: Chem 403 (Advanced Synthesis & Characterization, 2 hrs), Chem 404 (Biochemistry, 3 hrs), Chem 405 (Advanced Organic, 3 hrs), Chem 407 (Intro to Polymer Science, 3 hrs), Chem 408 (Biochemistry II, 3 hrs), Chem 497 (Special Studies, 1 hr), and Chem 498 (Chemistry Internship, 1hr).

The third modification gives the student the choice of taking Chem 303 (Instrumental Analysis) or Chem 313 (Environmental Chemistry). Both of these courses rely heavily on the use of instrumentation to identify and measure analytes. This will also help the department because it is unlikely that we will be able to offer both courses in the same year.

These changes do not change any minimum hour requirements for the major.