

The University of New Mexico Faculty Senate
Draft Meeting Minutes
March 28, 2023
3:00 P.M.
ONLINE

(Pending approval at the April 25, 2023, Faculty Senate Meeting)

1. Call to Order

The meeting was called to order at 3:06 p.m.

2. Approval of the Agenda

The agenda was approved.

3. Approval of the February 28, 2023, Meeting Minutes

The February 2023 minutes were approved.

4. Consent Agenda

Curricula Changes

The consent agenda was approved.

5. President's Report

University President Garnett Stokes was unable to attend.

6. Provost's Report

Provost James Holloway reported the following.

- On February 16, 2023, they opened the new Interdisciplinary Substance Use and Brain Injury (ISUBI) building on North Campus. It will be used to research substance abuse and brain injury, supporting both basic research and clinical research. It has a simulated bar to observe the behavior and behavior modification on the realistic side.
- There are two new regents, Paula Tackett, and Paul Blanchard.
- The Board of Regents elected Kim Sanchez Rael as the President/Chair. Jack Fortner as vice chair, and Bob Schwartz as the secretary-treasurer.
- The composition of the Regents' subcommittees has changed as well.
- Regent Randy Ko remains as the student regent.
- The 2023 legislative session is complete. Bills are lined up for the governor to sign. She has until April 7, 2023, at noon to sign bills or they become pocket vetoed.
- Overall, UNM did well getting new resources. Most funds are earmarked. There is a couple of percent increase in the Instruction and General (I&G) funds. It equals about \$7 million for main campus and about \$3 million for the Health Sciences Center (HSC).

- The UNM Governmental Relations team did well with Research and Public Service Projects (RPSP) funding which increased by almost \$9 million.
- Other funding includes money for the telescope on the Taos campus and new and expanded endowment for Native American Studies (NAS).
- Some other special appropriations were successful, most importantly the Opportunity Scholarship. Appropriations were made to cover the short fall from last year and to support the scholarship going forward. There was discussion on whether first-year students would be eligible for the scholarship, but the language was removed.
- State capital requests are about \$30 million, \$6 million on main campus, \$16 million for the HSC, and about \$1 million to each of the four branches.
- The 'Junior Bill' funding was about \$13 million. Most were earmarked for certain programs.
- UNM received a lot of support from the legislature this year.
- For bargaining (union) faculty and staff, increases in compensation will be determined through the negotiation processes.
- The State did fund 80% of the resources to do a six percent compensation increase for I&G supported faculty and staff. About 70% of faculty and staff are not funded by I&G however.
- Growing compensation has been a goal the last couple of years.
- Meetings are starting with the BoR this week to look at the UNM budget. It has been discussed at the BoR Student Success Teaching and Research (SSTAR) committee meeting.
- It is proposed that there be a three percent increase in base tuition across HSC and Main. At the branches it is proposed to be a zero percent increase.
- There will be an increase of about three percent in student fees.
- There is a \$22 increase in the Student Health and Counseling (SHAC) charge. It is the first step to address student mental health.
- For non-bargaining faculty and staff compensation, they are proposing a tiered system of increases so that faculty at the lower end of the salary scale will receive between 6-9 percent, the next range is 4-7 percent, and faculty and staff at the highest salary range would be 3-7 percent. A unit can do 6% for all if they have the funding. There is flexibility to grant lower and higher percentages of compensation increases.
- The vote on the budget will occur April 10, 2023. It is a meeting of the committee of the whole and there will not be public comment. The committee of the whole structure has not been used before. It is not known how BoR Chair Sanchez-Rael will run the meeting. Provost Holloway is not sure if the BoR will ask for comment from the audience.
- The proposed three percent tuition increase was built upon the need for compensation, new academic advisors, growing faculty lines, UNMPD, etc. The University is healthy. Reserves need to be increased as well. The budget is balanced with the highest needs addressed.

- The Arts and Sciences Dean search is the furthest along. The search advisory committee has recommended the candidates. On-campus interviews will occur in April.
- The Anderson School of Management Dean search is still developing the pool of candidates.
- Faculty represented by the United Academics of the University of New Mexico. (UA-UNM) will have their compensation package negotiated. Those discussions have been scheduled. A faculty member does not have to pay dues to be covered by the union. They are just not eligible for all the benefits.
- Faculty are not represented by the union in the HSC schools (School of Medicine, College of Population Health, College of Nursing, and the College of Pharmacy). Their faculty compensation determination is still being worked on by the HSC leadership. The intention there is to have something systematic, at least in the individual schools and colleges. It does not have to match what is negotiated with UA-UNM.
- For fiscal 2024, reserves are predicted to be \$30 million, where it ought to be above \$120 million. The basic idea of reserves is to have about 3 months of cash on hand to continue operating for a few months.

7. Faculty Senate President's Report

Faculty Senate President Finnie Coleman reported the following.

- Since the last Faculty Senate meeting, University President Garnett Stokes gave her State of the University address. President Coleman was glad to participate and hopes that it becomes a tradition.
- FS President Coleman would like to discuss the possibility of seating the Faculty Senate in the fall. It would be a formal seating of the new faculty senators as part of the Freshman Convocation ceremony. It would be an opportunity to pass the University Mace from the departing Faculty Senate President to the incoming Faculty Senate President. If senators support it, he asks to be contacted, or to contact University Secretary Nancy Middlebrook, or President-Elect Cris Elder.
- University Secretary Nancy Middlebrook provided an update on faculty elections. Ballots were sent to voting faculty today for the at-large Faculty Senators and for membership on the Committee on Governance. Please check your spam folder if you don't see it. The election will run for two weeks. Individuals for the Academic Freedom and Tenure Committee election are still being sought. There are seven seats available and ideally fourteen candidates are desired. You must be a tenured faculty member and not hold department chair or above. Only one person per department may serve.
- President Coleman added that there is a significant deficit of Faculty Senators from the College of Arts and Sciences (A&S). There is a potential for seven vacant seats. He encourages senators from A&S to recruit faculty to serve. It is important to have full representation.

8. New Graduate certificate in Public Policy

Director Melissa Binder, Master of Public Policy, presented the following request for a new graduate certificate in Public Policy.



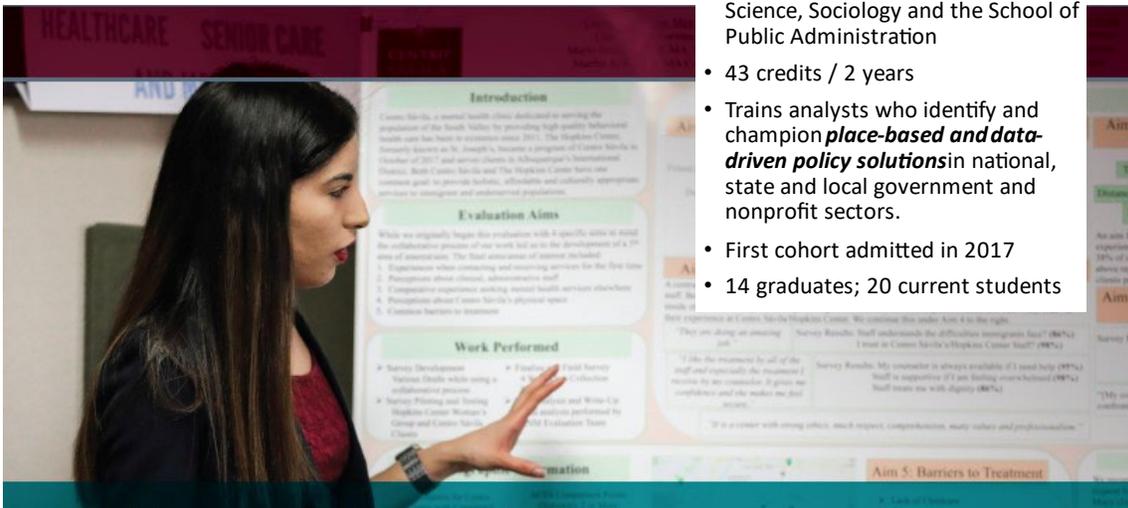
MASTER OF PUBLIC POLICY

Proposed Certificate in Public Policy

Spring 2023

UNM Master of Public Policy

- Interdisciplinary program jointly administered by Economics, Political Science, Sociology and the School of Public Administration
- 43 credits / 2 years
- Trains analysts who identify and champion **place-based and data-driven policy solutions** in national, state and local government and nonprofit sectors.
- First cohort admitted in 2017
- 14 graduates; 20 current students



Proposed Graduate Certificate in Public Policy

	Track I – General overview	Track II – Quantitative emphasis
	12 credits	15 credits
PUBP 501–Policy Analysis– 3 credits	✓	✓
PUBP 502– Evaluation Lab– 3 credits	✓	✓
Policy perspectives: 3 credits from any core curriculum courses public economics, the political context, organizational behavior, public budgeting	✓	
Diversity and Inclusion: 3 credits	✓	✓
Quantitative Methods: 6 credits in 2course sequence offered by Econ, Political Science or Sociology		✓✓
PORTFOLIO	✓	✓

A motion was made to approve the new graduate certificate and seconded. The Faculty Senate approved the certificate.

9. New Bachelor of Science in Chemical Biology

Chair Jeremy Edwards, Chemistry, presented the following request for a new Bachelor of Science in Chemical Biology. President Coleman stated that this request comes with special information. There are concerns from other bodies around the University about the program itself. Those concerns have not been properly addressed. He asks the senate for permission to hear the proposal, but to delay the vote or table the request until the other issues are resolved. A senator made the motion to hear the proposal and delay the vote. The motion was seconded. The Senate voted to hear the proposal and table any vote.

BS Chemical Biology

Jeremy Edwards

Distinguished Professor and Chair
Chemistry and Chemical Biology

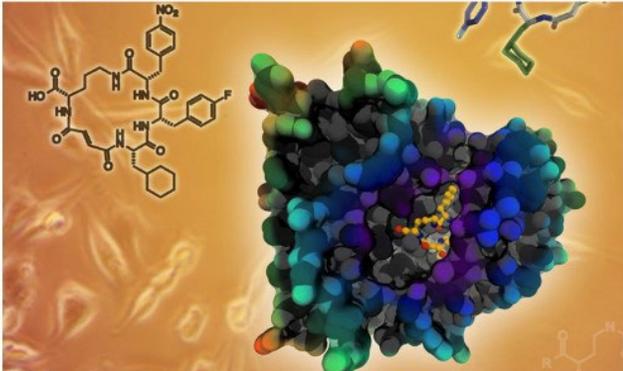
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What is chemical biology?

Posted by Milka Kostic | Published June 01, 2017, 09:00

Tweet Share Like 0 Share



- Is it Chemistry or Biology or Biochemistry?
- “Chemical biology is a relatively new field. It only emerged about **20 years ago when chemists became interested in applying chemistry to studying biological systems** .”
- The discipline has grown remarkably over a short period of time

- Chemical Biology is a recognized subfield within Chemistry— distinct from biochemistry
 - American Chemical Society Chemical Biology
 - Nature Chemical Biology
 - Current Opinion in Chemical Biology
 - Chemical Biology and Drug Design
 - etc
- ~20 years ago Dr. Begley summarized the discipline and how it can integrate with traditional chemistry education.
- Originally, defined as the application of chemistry to the study of molecular events in biological systems.
- Has now grown. Application of chemistry tools, techniques, and approaches to develop technologies and study/perturb biological systems.
- As one example, Chemical Biology majors will design and engineering biological pathways to make compounds. Where as, biochemists will study the pathways.

Chemical biology: an educational challenge for chemistry departments

Tadhg P Begley

Chemical biology, broadly defined as the application of chemistry to the study of molecular events in biological systems, presents an opportunity for the reorganization and revitalization of the chemistry curriculum.

Chemistry, with its roots in alchemy, has always been deeply interested in understanding the nature of life. However, for most of the history of chemistry, this problem proved to be too complex, leaving chemists to focus on the exploration of individual reactions and simple systems that could be studied in molecular detail. Biologists, who were more comfortable studying large, complex and often poorly defined systems, adopted the problem of understanding the living state. This has now changed. The availability of efficient biomolecular syntheses, reliable protein overexpression and purification techniques, the analysis of protein modification by mass spectrometry and high-resolution macromolecular structure determination has enabled chemists to manipulate and characterize biomolecules with greater facility than small molecules could be manipulated and characterized 50 years ago. Genome sequence, transcriptome and proteome analysis and

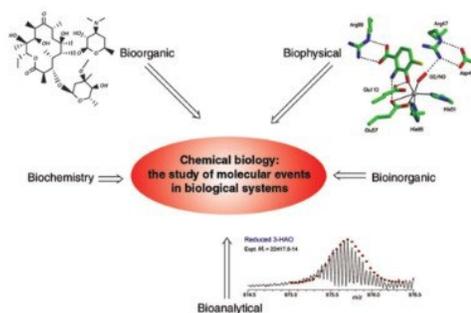
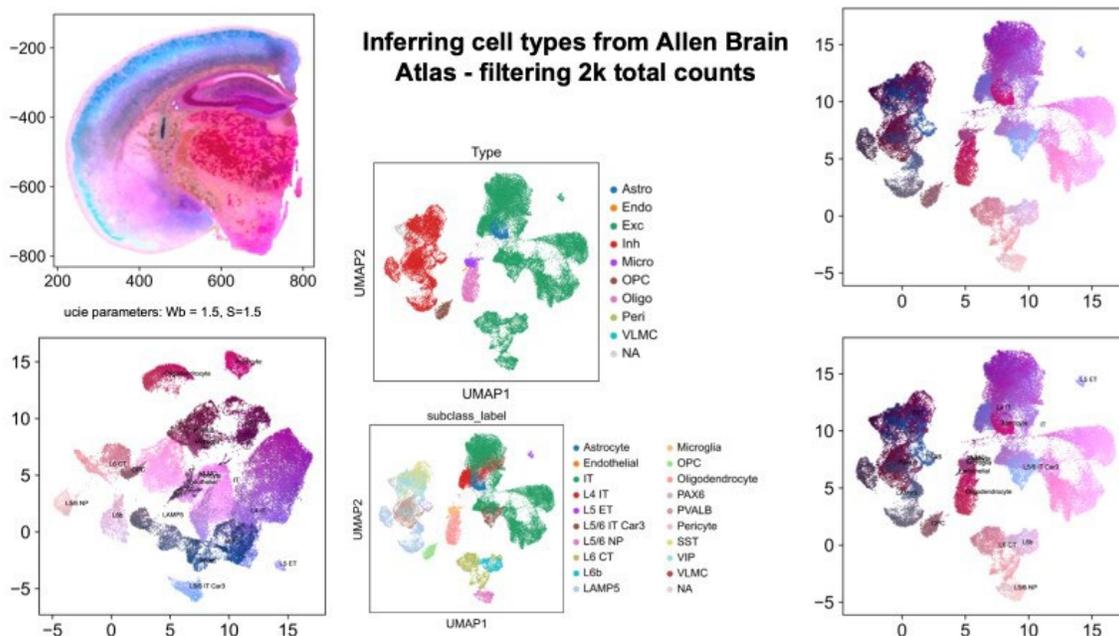


Figure 1 Chemical biology represents a new integration of the subdisciplines of biological chemistry.

236

VOLUME 1 NUMBER 5 OCTOBER 2005 NATURE CHEMICAL BIOLOGY



Vanderbilt University



Requirements

[Sample Curriculum Biochemistry Track](#)

[Sample Curriculum Chemical Biology Track](#)

Major in Biochemistry and Chemical Biology

Overview

The Biochemistry and Chemical Biology major tracks share fundamental core elements, but have a distinct set of foundational courses, track-specific electives, and laboratory requirements. All students are required to complete a set of basic science and mathematics courses. The major consists of 32 credit hours beyond these basic science and mathematics courses. All students complete 12 credit hours of core courses, 14 credit hours of either Biochemistry or Chemical Biology track, and 6 credit hours of general electives.



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Website: www.nmsu.edu/chem

March 27, 2023

Dr. Jeremy Edwards
Distinguished Professor and Chair
Department of Chemistry and Chemical Biology
University of New Mexico

Re: Support of Proposed B.S. degree in Chemical Biology

Dear Jeremy,

I am writing to offer my full support for the new Chemical Biology degree program at UNM. Chemical biology is a distinct discipline from Biochemistry. Chemical Biology studies the application of chemical techniques to solve biological problems while Biochemistry studies the chemical processes that occur in biological systems. This difference between these disciplines is especially important on the UNM campus where the Biochemistry curricula is housed in a Health Sciences department. Therefore, it would be beneficial to offer a degree in Chemical Biology for University of New Mexico students housed in a Chemistry-centric department.

I have looked over the proposed Chemical Biology degree curricula and it would not overlap with the NMSU B.S. Biochemistry program beyond the second year. Your proposed new course sequence and lab in "Biological Chemistry and Chemical Biology" would clearly provide the needed biochemistry foundation for chemistry-centric students while also introducing concepts important for chemical biology majors that are not covered in a typical biochemistry two-semester sequence. Without this major, undergraduate students interested in solving biological problems via physical and analytical approaches may seek educational opportunities outside of New Mexico.

Please feel free to provide my contact information as a strong supporter of this new degree program. I applaud your efforts to ensure the State of New Mexico remains at the cutting edge of Chemical Science education.

Sincerely,

Shelby Lewis
Academic Department Head
PBRP New Mexico DNA Network for Biomedical Research (NM-4NSERC)
www100.nmsu.edu

I am writing to offer my full support for the new Chemical Biology degree program at UNM. **Chemical biology is a distinct discipline from Biochemistry.** Chemical Biology studies the application of chemical techniques to solve biological problems while Biochemistry studies the chemical processes that occur in biological systems. This difference between these disciplines is especially important on the UNM campus where the Biochemistry curricula is housed in a Health Sciences department. Therefore, it would be beneficial to offer a degree in Chemical Biology for University of New Mexico students housed in a Chemistry-centric department.

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Please feel free to provide my contact information as a strong supporter of this new degree program. I applaud your efforts to ensure the State of New Mexico remains at the cutting edge of Chemical Science education.

The Program's major goals

1. Provide a novel degree program option for students not currently provided by other institutions within New Mexico.
2. Provide a novel degree option for students that not currently well served by the current undergraduate degree options at the UNM.
3. To generate Chemical Biology graduates who are well prepared to pursue postgraduate education and training in other science and/or professional fields (M.S., Ph.D., M.D., or Pharm.D.) at the UNM or other colleges/universities.

The Program's major goals

1. Provide a novel degree program option for students not currently provided by other institutions within New Mexico.
Chemical Biology is distinct from Biochemistry, Chemistry, and Biology. No overlap after year 2 with any of these programs. Biochemistry is great at preparing students for the biomedical sciences, particularly medical school. However, Chemical Biology will serve a different population of students with different interests and needs.
2. Provide a novel degree option for students that not currently well served by the current undergraduate degree options at the UNM.
*Biochemistry at UNM is "biomedical focused." Chemical Biology is not biomedical focused. We will fill this void and serve these specific students and employers. Many students want to enter the **biotech private sector, national labs, graduate school (nonbiomedical), pharmaceutical industry (drug discovery, cheminformatics), chemical industry, computational chemistry.** While also keeping the door open to medical/dental/pharmacy/veterinarian schools (point #3).*
3. To generate Chemical Biology graduates who are well prepared to pursue postgraduate education and training in other science and/or professional fields (M.S., Ph.D., M.D., or Pharm.D.) at the UNM or other colleges/universities.

First Year			
Fall Semester		Spring Semester	
CHEM 1215 and 1215L: General Chemistry I	4	CHEM 1225 and 1225L: General Chemistry II	4
MATH 1430: Applications of Calculus I	3	MATH 1440: Applications of Calculus II	3
ENGL 1110 or 1110X + 1110Y: Composition I	3	ENGL 1120: Composition II	3
Foreign Language	3	BIOL 2102/2103L: organisms to ecosystem	4
BIOL 2101: Molecules to Cells	3	Core curriculum (Social, Arts, Humanities)	3
Total Hours	16	Total Hours	17
Second Year			
Fall Semester		Spring Semester	
CHEM 301: Organic Chemistry I	3	CHEM 302: Organic Chemistry II	3
CHEM 303L: Organic Chemistry I Lab	1	CHEM 304L: Organic Chemistry II Lab	1
PHYS 1230: Algebra-Based Physics I + Lab	4	PHYS 1240: Algebra-Based Physics II + Lab	4
MATH 1350: Introduction to Statistics	3	CHEM 2310C: Quantitative Analysis	4
Core Curriculum (Social, Arts, Humanities)	3	Core Curriculum (Social, Arts, Humanities)	3
Elective	3		
Total Hours	17	Total Hours	15
Third Year			
Fall Semester		Spring Semester	
CHEM 421: Biological Chemistry	3	CHEM 422: Chemical Biology	3
CHEM 315: Introductory Physical Chemistry	4	CHEM 433: Bio-Inorganic Chemistry	3
Minor/Elective	3	CHEM 495: Research	3
CHEM 390: Professional Seminar	1	CHEM 226: Genomics	1
Minor/Elective	3	CHEM 424: Bioorthogonal chemistry	3
Total Hours	14	Total Hours	13
Fourth Year			
Fall Semester		Spring Semester	
CHEM 423: Synthetic Biology	3	CHEM 431: Advanced Inorganic Chemistry	3
CHEM 422: Chemical Biology Lab	3	Minor/Elective	3
CHEM 495: Research	2	CHEM 495: Research	2
CHEM 471: Medicinal Chemistry	3	Minor/Elective	3
Minor/Elective	3	Minor/Elective	3
Total Hours	14	Total Hours	13
Overall Fall Semester Hours	61	Overall Spring Semester Hours	59

Many similarities to many STEM programs.
Including Biol, Chem, Bioc, EPS, Phys, Chem Eng.

Many similarities to many STEM programs.
Including Biol, Chem, Bioc, Chem Eng.



5 October 2022

The Royal Swedish Academy of Sciences has decided to award the Nobel Prize in Chemistry 2022 to

Carolyn R. Bertozzi
Stanford University, CA, USA

Morten Meldal
University of Copenhagen, Denmark

K. Barry Sharpless
Scripps Research, La Jolla, CA, USA

"for the development of click chemistry and bioorthogonal chemistry"

Email from Dr. Parra claiming duplicates

Number Title CH
MATH 1430 (or 1512) Applications of Calculus I 3
MATH 1440 (or 1522) Applications of Calculus II 3
MATH 1350 (or STAT 345) Introduction to Statistics 3
Total 9
Physics
Number Title CH
PHYS 1230 (or 1310L) Algebra-based Physics I 3
PHYS 1230L (or 1310L) Algebra-based Physics I Laboratory 1
PHYS 1240 (or 1320) Algebra-based Physics II 3
PHYS 1240L (or 1320L) Algebra-based Physics II Laboratory 1
Total 8
Biology
Number Title CH
BIOL 2101 Principles of Biology: Cellular and Molecular Lecture and Laboratory 4
BIOL 2101L Principles of Biology: Genetics Lecture and Laboratory 4
Total 8
Total 25
Major program
Number Title CH
CHEM 1215 (or 1217) General Chemistry I for STEM Majors 3
CHEM 1215L General Chemistry I for STEM Majors Laboratory 1
CHEM 1225 (or 1227) General Chemistry II for STEM Majors 3
CHEM 1225L General Chemistry II for STEM Majors Laboratory 1
CHEM 2310C Quantitative Analysis Lecture and Laboratory 4
CHEM 301 Organic Chemistry 3
CHEM 302 Organic Chemistry 3
CHEM 303L Organic Chemistry Laboratory 1
CHEM 304L Organic Chemistry Laboratory 1
CHEM 315 Introductory Physical Chemistry 4
CHEM 421 Biological Chemistry and Chemical Biology 3
CHEM 422/522 Biological Chemistry and Chemical Biology 3
CHEM 422L Biological Chemistry and Chemical Biology Laboratory Methods 3
CHEM 433 Bioinorganic Chemistry 3
CHEM 390 Chemical Biology Research Methods Seminar Series 1
Total 37
Plus 6 CH of upper-division electives from the following list gives a total of 43 CH in the major and 31 CH of ~~division~~ courses.

Upper Division Chemistry Elective Courses

CHEM 452: Polymer Chemistry	3	CHEM 423: Introduction to Synthetic Biology
CHEM 431: Advanced Inorganic	3	CHEM 426: Genome Technologies and Bioinformatics
CHEM 457: Environmental Chemistry	3	CHEM 428: Molecular Biophysics

Email from Dr. Parra claiming duplicates – Correct inaccuracies

Number Title CH
MATH 1430(or 1512)Applications of Calculus I 1
MATH 1440(or 1522) Applications of Calculus II 3
MATH 1350(or SWP 345)Introduction to Statistics 3 No overlap – Biochemistry does not require this course.

Total 9
 Physics
 Number Title CH
PHYS 1210(or 1310)Algebra-based Physics I 3
PHYS 1230(or 1310L)Algebra-based Physics I Laboratory 1
PHYS 1221(or 1320) Algebra-based Physics II 3
PHYS 1240(or 1320L) Algebra-based Physics II Laboratory 1

Total 6
 Biology
 Number Title CH
BIDL 2110Principles of Biology: Cellular and Molecular Lecture and Laboratory 4
BIDL 2410Principles of Biology: Genetics Lecture and Laboratory 4

Total 8
 Total 25
 Major program

Number Title CH
CHEM 1214(or 1217) General Chemistry I for STEM Majors 3
CHEM 1215General Chemistry I for STEM Majors Laboratory 1
CHEM 1224(or 1227) General Chemistry II for STEM Majors 1 3
CHEM 1225General Chemistry II for STEM Majors Laboratory 1
CHEM 2210Quantitative Analysis Lecture and Laboratory 4
CHEM 300Organic Chemistry 3
CHEM 300Organic Chemistry 3
CHEM 303Organic Chemistry Laboratory 1
CHEM 304Organic Chemistry Laboratory 1
CHEM 311Introductory Physical Chemistry 4
CHEM 421Biochemistry for Chemical Biology majors 3
CHEM 422/522Biochemistry for Chemical Biology majors 3
CHEM 422Biochemistry for Chemical Biology majors Laboratory Methods 3
CHEM 433Bioinorganic Chemistry 3
CHEM 390Chemical Biology Research Methods Seminar Series 1

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Upper Division Chemistry Elective Courses

CHEM 452: Polymer Chemistry 3 CHEM 423: Introduction to Synthetic Biology
 CHEM 431: Advanced Inorganic 3 **CHEM 426: Genome Technologies and Bioinformatics**
 CHEM 457: Environmental Chemistry 3 **CHEM 428: Molecular Biophysics**

BIOC 451. Physical Biochemistry. (3)

A quantitative physical chemical approach to analyzing macromolecular structure and function; electrophoretic and hydrodynamic methods; mass spectrometry; optical and vibrational spectroscopic methods; nuclear magnetic resonance; diffraction methods; and computational techniques.

Prerequisite: 445 and (CHEM **311 or CHEM **315).

(Fall)

Only overlap is foundational biochemistry concepts– We agree to name change if needed.
 These courses will provide material that meets med/pharm school entry requirements.
 There are substantial differences between our courses and the BIOC courses.

No overlap – I assume Dr. Parra is equating this to a topics course in 'omics' they have only recently taught by a lecturer. I have taught this course for ~10 years at the graduate level. I am an international leader in genomics and the genome sciences. There is absolutely no comparison between these courses.

No overlap – I can only assume that Dr. Parra incorrectly equates this to their Physical Biochemistry course (BIOC 451).

Number Title CH
MATH 1430(or 1512)Applications of Calculus I 1
MATH 1440(or 1522) Applications of Calculus II 3
MATH 1350(or SWP 345)Introduction to Statistics 3

Total 9
 Physics
 Number Title CH
PHYS 1210(or 1310)Algebra-based Physics I 3
PHYS 1230(or 1310L)Algebra-based Physics I Laboratory 1
PHYS 1221(or 1320) Algebra-based Physics II 3
PHYS 1240(or 1320L) Algebra-based Physics II Laboratory 1

Total 8
 Biology
 Number Title CH
BIDL 2110Principles of Biology: Cellular and Molecular Lecture and Laboratory 4
BIDL 2410Principles of Biology: Genetics Lecture and Laboratory 4

Total 12
 Total 25
 Major program

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CHEM 1215General Chemistry I for STEM Majors Laboratory 1
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 CHEM 457: Environmental Chemistry 3 CHEM 428: Molecular Biophysics

Yellow highlights are the actual duplicates between Biochemistry and Chemical Biology

Almost all courses Dr. Parra listed as duplicative are already in almost all STEM programs. Including the existing Chemistry and Biology degree programs, as well as Chemical Engineering, Earth and Planetary Sciences, Physics, etc.

These duplicates are a solid core for most STEM majors.

Number Title CH
MATH 1430(or 1512)Applications of Calculus I 3 **Required for all STEM majors**
MATH 1440(or 1522)Applications of Calculus II 3
MATH 1350(or SP1 345)Introduction to Statistics 3
 Total 9
 Physics
 Number Title CH
PHYS 1210(or 1310)Algebra-based Physics I 3
PHYS 1210(or 1310L)Algebra-based Physics I Laboratory 1 **Required for all STEM majors**
PHYS 1220(or 1320)Algebra-based Physics II 3
PHYS 1220(or 1320L)Algebra-based Physics II Laboratory 1
 Total 9
 Biology
 Number Title CH
BIOL 2110Principles of Biology: Cellular and Molecular Lecture and Laboratory 4 **Required for Biol, Bioc, and Chemical Biology majors**
BIOL 2110Principles of Biology: Genetics Lecture and Laboratory 4
 Total 8
 Total 25
 Major program
 Number Title CH
CHEM 1210(or 1217) General Chemistry I for STEM Majors 3 **Required for nearly all STEM majors**
CHEM 1215General Chemistry I for STEM Majors Laboratory 1
CHEM 1220(or 1227) General Chemistry II for STEM Majors 3
CHEM 1225General Chemistry II for STEM Majors Laboratory 1
CHEM 2310Quantitative Analysis Lecture and Laboratory 4 **Required for Chem majors, many biol and bioc take this course. Not a prereq for any bioc courses**
CHEM 301Organic Chemistry 3
CHEM 302Organic Chemistry 3
CHEM 303Organic Chemistry Laboratory 1 **Required for many STEM majors (Chem, Biol-formerly, Bioc, Chem Eng, Chemical Biology)**
CHEM 304Organic Chemistry Laboratory 1
CHEM 31Introductory Physical Chemistry 4 **We teach this course primarily for Chem B.A. students. Bioc students take this course.**
CHEM 421 Biological Chemistry and Chemical Biology 3
CHEM 422/522 Biological Chemistry and Chemical Biology 3.
CHEM 422L Biological Chemistry and Chemical Biology Laboratory Methods 3.
CHEM 433 Bioinorganic Chemistry 3
CHEM 390 Chemical Biology Research Methods Seminar Series 1
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Missing CHEM 424: Bioorthogonal Chemistry

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Fall Semester		Spring Semester
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Foreign Language	3	BIOL 2102/2103L: organisms to ecosystem 4
BIOL 2101: Molecules to Cells	3	Core curriculum (Social, Arts, Humanities) 3
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MATH 1350: Introduction to Statistics	3	CHEM 2310C: Quantitative Analysis 4
Core Curriculum (Social, Arts, Humanities)	3	Core Curriculum (Social, Arts, Humanities) 3
Elective	3	
Total Hours	17	Total Hours 15
Third Year		
Fall Semester		Spring Semester
CHEM 421: Biological Chemistry	3	CHEM 422: Chemical Biology 3
CHEM 315: Introductory Physical Chemistry	4	CHEM 433: Bio-Inorganic Chemistry 3
Minor/Elective	3	CHEM 495: Research 3
CHEM 390: Professional Seminar	1	CHEM 226: Genomics 1
Minor/Elective	3	CHEM 424: Bioorthogonal chemistry 3
Total Hours	14	Total Hours 13
Fourth Year		
Fall Semester		Spring Semester
CHEM 423: Synthetic Biology	3	CHEM 431: Advanced Inorganic Chemistry 3
CHEM 422: Chemical Biology Lab	3	Minor/Elective 3
CHEM 495: Research	2	CHEM 495: Research 2
CHEM 471: Medicinal Chemistry	3	Minor/Elective 3
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Total Hours	14	Total Hours 13
Overall Fall Semester Hours	61	Overall Spring Semester Hours 59

Many similarities to many STEM programs. Including Biol, Chem, Bioc, EPS, Phys, Chem Eng.

Many similarities to many STEM programs. Including Biol, Chem, Bioc, Chem Eng.

CHEM390 is an introduction to Chemical Biology. Here students will learn the details of what Chemical Biologists do. Chem 421/422 are our Biochemistry for Chemical biologists sequence. It will be distinct from the biochemistry sequence. It will also provide more opportunities for UNM students to take biochemistry that is essential for many programs. i.e. med school, pharmacy school, ACS certified B.S. Opportunities for students to take additionally CHEM, BIOL, MATH, PHYS, or other STEM courses BIOC courses are not approved electives for the Chemical Biology degree program.

Rob Orlando Letter Excerpts

- “Chemical Biology is **distinctly different** from the traditional path of Biochemistry”
- “Chemical Biology [...] supports modern scientific thought and experimental approaches by educating students on the uses and advantages of applying chemical principles and knowledge to the study of biology, biochemistry, medicine and pharmacy”
- “the foundations of both **CHEM 421 and 422 [...] is very different from applying an approach using traditional biochemistry** For example, **I intend to provide significant emphasis on pharmacology and basic principles in medicinal chemistry**. These topics are not taught in the traditional Biochemistry courses, yet are essential for students who wish to pursue advanced education in medicine and pharmacy.”
- “As support for the importance of a major in Chemical Biology, I point to the major Universities around the nation that have well established Chemical Biology Programs. **We are behind the curve in implementing this important major at UNM**”

Chair Karlett Parra, Biochemistry and Molecular Biology, was recognized. She stated that the rationale for the BS in Chemical Biology is inaccurate. In theory it does not provide a novel degree and largely duplicates the current undergraduate program. The goals ignore the current highly successful Biochemistry Program.

A motion was made to table the request. The motion was seconded. The Faculty Senate voted to table the BS in Chemical Biology.

10. Bachelor of Arts in Liberal Arts & Integrated Studies

Director David Weiss, Liberal Arts, presented the following changes to the Liberal Arts and Integrated Studies program.



UNIVERSITY COLLEGE CURRICULUM PROPOSAL(S) FOR FALL 2023

PRESENTATION TO FACULTY SENATE

MARCH 28, 2023

DAVID WEISS, PH.D.

DIRECTOR OF LIBERAL ARTS & INTEGRATIVE STUDIES

PROBLEM (CURRENT SITUATION):

2 NEARLY IDENTICAL BACHELOR'S PROGRAMS

- **Bachelor of Arts in Liberal Arts (BALA)**
 - "Build your own adventure": design a degree program combining 3 or more concentrations into a common theme
 - **Optional: shared credit UG + grad degrees program (BALA + MPA)**
 - Required courses: LAIS 150, 311, 499
 - Must submit plan of study, statement of purpose, and qualified signature form
 - Must submit graduation essay or capstone paper (can use LAIS 311 or 409 for this)
- **Bachelor of Integrative Studies & Innovation (BISI)**
 - "Build your own adventure": design a degree program combining 3 or more concentrations into a common theme
 - **Optional: Military Studies concentration**
 - **Optional: Global & National Security conc.**
 - Required courses: LAIS 150, 311, 499
 - Must submit plan of study, statement of purpose
 - Must submit capstone paper (LAIS 409)

PROBLEM (CTD):

WHAT *ONCE* DIFFERENTIATED THE 2 PROGRAMS IS GONE

- BISI program (but not BALA) gave students option to take the following business/industry oriented courses:
 - LAIS 341: Innovation Academy
 - LAIS 342: Disney College Program Internship
 - LAIS 343: Create Sell Bank
 - LAIS 344: Student Athlete Identity
- But when their creator—a former UC interim dean deeply involved with Innovation Academy—moved to a different UNM college, he took those courses with him.
- Students can still take them—at Anderson—but not as BISI/UC courses

RESULT

- Two nearly identical bachelor's programs
 - Not the original intention, but that's where we are now
- Student confusion
 - *How do the degrees differ?*
 - *What are their relative pros and cons?*
 - *I know—and employers and grad schools know what a Bachelor of Arts (BA) is. But what the heck is a Bachelor of Integrative Studies and Innovation? Will a BISI help me find a job?*
 - *And why aren't there any "innovation" classes, anyway?*
- Currently (spring '23) we have 447 BALA majors— but only 29 BISI majors
- Bottom line: no practical reason to offer both programs

PROPOSED SOLUTION

Part 1

Offer only one bachelor's Program:

BA-LAIS: Bachelor of Arts in Liberal Arts & Integrative Studies

(more on this in a moment)

Part 2

Demise BISI

GOOD NEWS

- Part 1 of the solution – the BA-LAIS degree program -- has already been approved at all levels
- Only part 2 – demising BISI – requires approval, hence this presentation

A motion was made to approve the demise of BISI and seconded. The Faculty Senate voted in favor of the curricular changes.

11. Branch Community College Council (BCCC) Workload Resolution

BCCC Chair-elect John Burke presented the following resolution from the Council.

RESOLUTION

Call to Codify a 24-Credit Teaching Load Per Academic Year for Full-Time Faculty at UNM Branch Campuses

Whereas teaching, service, and scholarly work are required for full-time faculty seeking tenure & promotion at the UNM branch campuses, and where the Full Time Equivalent (FTE) is 1.0 FTE and each 3-credit class is quantified as .20 FTE.

Whereas full-time faculty at UNM-Gallup & UNM-Taos teach 24 credits per 9-month academic year, which averages out to a 12-credit teaching load each fall & spring, a load that translates to four .20 FTE courses per semester (or administrative equivalent), with service & scholarly work accounting for the remaining .20 FTE, bringing the total to 1.0 FTE.

Whereas full-time faculty at UNM-Los Alamos teach 30 credits per 9-month academic year, which averages out to a 15-credit load each fall & spring semester, a load that translates to five .20 FTE courses (or administrative equivalent). In this scenario, there is no accounting for service & scholarly work. If service & scholarly work were accounted for at .20 FTE, like it is at Gallup and Taos, the total FTE for full-time faculty at Los Alamos would be 1.20 FTE per 9-month academic year (See Table 1).

TABLE 1

<i>Campuses</i>	<i>CRH per year teaching</i>	<i>claimed teaching % workload</i>	<i>actual teaching % workload</i>	<i>service & scholarly work % workload</i>	<i>FTE per 9-month academic year</i>
Los Alamos	30	80	100	20	1.20
Valencia	27	80	90	20	1.10
Gallup	24	80	80	20	1.00
Taos	24	80	80	20	1.00

Whereas full-time faculty at UNM-Valencia teach 27 credits per 9-month academic year, which averages out to a 15-credit load one semester (five .20 FTE courses or administrative equivalent) and

a 12-credit load one semester (four .20 FTE courses or administrative equivalent). In this scenario, there is only partial accounting (.10 FTE) for service & scholarly work. If service & scholarly work was accounted for at .20 FTE, like it is at Gallup and Taos, the total FTE for full-time faculty at Valencia would be 1.10 FTE per 9-month academic year (See Table 1).

Whereas this discrepancy in teaching load leads to a discrepancy in payment per credit given a theoretical base pay of \$50,000, meaning that branch campus faculty are getting paid inequitably to teach the same classes across the branches (See Table 2).

TABLE 2

<i>Campus</i>	<i>CRH per year teaching</i>	<i>teach % workload</i>	<i>3 CRH % workload</i>	<i>3 CRH % salary earned</i>	<i>base pay of \$50,000 earned 3 CRH</i>
Los Alamos	30	80	8	8	4000
Valencia	27	80	9	9	4444
Gallup	24	80	10	10	5000
Taos	24	80	10	10	5000

Whereas to achieve tenure, full-time faculty at Valencia & Los Alamos are currently required to teach 6 to 12 more courses than faculty at Gallup & Taos. With teaching excellence being required for continuance, tenure, & promotion of full-time faculty in the branch campuses, the measures for 'teaching excellence' must be consistent for full-time faculty in the branch campuses. Maintaining inconsistent teaching load policies between the branch campuses is an inequitable practice (See Table 3).

TABLE 3

RPT Process		Code 3	Code 6
<i>Campus</i>	<i>CRH per year teaching</i>	<i>2 years CRH taught</i>	<i>5 years CRH taught</i>
Los Alamos	30	60	150
Valencia	27	54	135
Gallup	24	48	120
Taos	24	48	120

Whereas service & scholarly work are required for continuance, tenure, & promotion of full-time faculty in the branch campuses, and not fully accounting for service & scholarly work for full-time faculty at Los Alamos & Valencia is an inequitable practice, and where workload policy discrepancies at the branch campuses limit research and education collaboration and thus do not align with the UNM 2040 Goal of "One University;" now, therefore, be it

Resolved

that the Faculty Senate calls upon the Provost and the University President to codify a 24-credit teaching load (or administrative equivalent) per 9-month academic year at 80% of workload (with service & scholarly work accounting for 20% of workload) for full-time faculty at all UNM branch campuses effective for the Fall 2023 semester

A motion was made and seconded. The resolution was approved by the Faculty Senate.

12. Public Comment

There was no public comment.

13. Meeting adjourned at 5:16 p.m.