College of Science Curriculum Committee

Minutes

September 9, 2021

Hickory 254-H

3:45 pm – 5:00 pm

**Voting**:

☒ Sushama Dandekar ☒ David Hoeinghaus ☒ Jessica Moore

☒ Nirmala Naresh ☐ Bibhudutta Rout

**Non-Voting**:

☒ Ed Dzialowski ☒ John Quintanilla ☒ Brittany Reiner

**Visitors:**

☒ Molly Atkinson ☒ Michael Monticino ☒ Rebecca Weber

☒ Miriam Freeman ☒ Hong Wang

1. Welcome
2. Notes from UCC / Graduate Council
3. Undergraduate Program (for 2022-23 catalog)
	1. Department of Biological Sciences
	2. Department of Chemistry
4. **CHEM 1400: First Year Seminar in Chemistry APPROVED**

[**https://unt.curriculog.com/proposal:10660/form**](https://unt.curriculog.com/proposal%3A10660/form)

**Proposed: 2022-23 Change in Existing Course (NOT Core Curriculum)**

*Justification: This course is intended to be a freshman seminar course for freshmen chemistry majors in their first semester of college. Upper class students and students outside of the Department of Chemistry should not enroll in this course without express permission from the department. When the course was originally updated and added to the degree plan for our majors, we overlooked this prerequisite.*

1. **CHEM 1980: Problem Solving in Chemistry APPROVED**

[**https://unt.curriculog.com/proposal:10728/form**](https://unt.curriculog.com/proposal%3A10728/form) **Proposed: Experimental Course**

*Justification: This course is intended to support students who feel that they are not prepared to succeed in CHEM 1410 in their first try. The DFW rate of CHEM 1410 is high (~30%) and part of this is due to students not being prepared to complete the work required in a college-level chemistry course. There is not time to provide the remediation needed for students to be successful in CHEM 1410 itself, due to the amount of students enrolled and the amount of material to cover. This course provides just-in-time teaching of applied math skills, chemistry knowledge, and problem solving techniques, as well as addressing study skills, time management, and test preparation.*

*This course has already been offered as an experimental course for Fall 2020, Spring 2021, and Fall 2021. However, the restrictions caused by the pandemic (social distancing for in-person courses, an emphasis on remote delivery) caused the implementation of this course to not go as planned. We would like for this course to be offered as an experimental course for one more semester. The permanent course (CHEM 1210) has been approved for the 2022-2023 catalog.*

1. **CHEM 3330: Forensic Science Analysis APPROVED**

[**https://unt.curriculog.com/proposal:10407/form**](https://unt.curriculog.com/proposal%3A10407/form)

**Proposed: 2022-23 Change in Existing Course (NOT Core Curriculum)**

*Justification: The course is missing the pre-requisite.*

1. **CHEM 3452: Quantitative Analysis Laboratory APPROVED**

[**https://unt.curriculog.com/proposal:10408/form**](https://unt.curriculog.com/proposal%3A10408/form)

**Proposed: 2022-23 Change in Existing Course (NOT Core Curriculum)**

*Justification: Update pre-requisite for course for consistency within the department.*

1. **CHEM 3510: Physical Chemistry I APPROVED**

[**https://unt.curriculog.com/proposal:10409/form**](https://unt.curriculog.com/proposal%3A10409/form)

**Proposed: 2022-23 Change in Existing Course (NOT Core Curriculum)**

*Justification: Adding in the lab as a co-requisite for consistency within the department courses. Adding "I" to the course title to differentiate between 3510 and 3520.*

1. **CHEM 3520: Physical Chemistry II APPROVED**

[**https://unt.curriculog.com/proposal:10410/form**](https://unt.curriculog.com/proposal%3A10410/form)

**Proposed: 2022-23 Change in Existing Course (NOT Core Curriculum)**

*Justification: Adding in the lab as a co-requisite for consistency within the department courses. Adding "II" to the course title to differentiate between 3510 and 3520.*

1. **CHEM 4360: Principles of Forensic Science APPROVED**

[**https://unt.curriculog.com/proposal:10411/form**](https://unt.curriculog.com/proposal%3A10411/form)

**Proposed: 2022-23 Change in Existing Course (NOT Core Curriculum)**

*Justification: Updated corequisite to add C or better for consistency within the department courses. In addition, earning below a C in the pre-requisite course will not set up the students to be successful in this course.*

1. **CHEM 4610: Advanced Inorganic Chemistry APPROVED**

[**https://unt.curriculog.com/proposal:10412/form**](https://unt.curriculog.com/proposal%3A10412/form)

**Proposed: 2022-23 Change in Existing Course (NOT Core Curriculum)**

*Justification: The contact hours were listed incorrectly. They have been removed, as this is a lecture course with no lab or recitation section.*

1. **CHEM 4631: Instrumental Analysis APPROVED**

[**https://unt.curriculog.com/proposal:10413/form**](https://unt.curriculog.com/proposal%3A10413/form)

**Proposed: 2022-23 Change in Existing Course (NOT Core Curriculum)**

*Justification: Adding in the lab as a co-requisite for consistency within the department courses.*

1. **CHEM 4632: Instrumental Analysis Laboratory APPROVED**

[**https://unt.curriculog.com/proposal:10414/form**](https://unt.curriculog.com/proposal%3A10414/form)

**Proposed: 2022-23 Change in Existing Course (NOT Core Curriculum)**

*Justification: Updated co-requisite for consistency within the department courses.*

1. **Bachelor of Science in Chemistry APPROVED**

[**https://unt.curriculog.com/proposal:10446/form**](https://unt.curriculog.com/proposal%3A10446/form)

**Proposed: 2022-23 Change in Program**

*Justification: We have added in another sequence to satisfy the physics requirements. There is no change in the requirements to earn the degree.*

1. **Chemistry Minor APPROVED**

[**https://unt.curriculog.com/proposal:10444/form**](https://unt.curriculog.com/proposal%3A10444/form)

**Proposed: 2022-23 Change in Program**

*Justification: We have added in CHEM 1412 and 1422 as another option to complete the General Chemistry sequence for the minor. The overall requirements have not changed, however.*

1. **Chemistry, BS with grad track option leading to Chemistry, MS APPROVED**

[**https://unt.curriculog.com/proposal:10416/form**](https://unt.curriculog.com/proposal%3A10416/form)

**Proposed: 2022-23 Change in Program – Grad Track**

*Justification: On John Quintanilla’s suggestion, we deleted the “Required Courses” section and modified this section to more accurately reflect how the Grad Track program works and provide a summary of what will be needed to prepare for the M.S. degree.*

1. **Chemistry Teacher Certification APPROVED**

[**https://unt.curriculog.com/proposal:10447/form**](https://unt.curriculog.com/proposal%3A10447/form)

**Proposed: 2022-23 Change in Program**

*Justification: We have added another option for students to satisfy the physics requirements for the degree.*

1. **Physical Science Teacher Certification (Chemistry) APPROVED**

**[https://unt.curriculog.com/proposal:10448/form](https://unt.curriculog.com/proposal%3A10448/form)**

**Proposed: 2022-23 Change in Program**

*Justification: We are adding in other option for students to satisfy the physics requirements in both the BA and BS.*

* 1. Department of Mathematics
	2. Department of Physics
	3. Teach North Texas
	4. Interdisciplinary Program in Applied and Computational Science
		1. **Certificate in Data Analysis APPROVED**

[**https://unt.curriculog.com/proposal:10270/form**](https://unt.curriculog.com/proposal%3A10270/form)

**Proposed: 2022-23 Change in Program**

*Justification: Provide alternate course option towards completion of the Data Analytics Certificate. MATH 3680 is similar in content as IPAC 4130 and provides the necessary preparation for students to be successful in IPAC 4230. Moreover, many Mathematics majors pursuing the Data Analytics Certificate will have taken MATH 3680 as part of their degree plan. This will allow them to count that course towards the certificate and not have to take a similar course (IPAC 4130).*

* + 1. **Certificate in Computational Science APPROVED**

[**https://unt.curriculog.com/proposal:10655/form**](https://unt.curriculog.com/proposal%3A10655/form)

**Proposed: 2022-23 Change in Program**

*Justification: Robust research & development initiatives in both academics and industry depend on the integration of theory, experimentation, big data, and computation. The Undergraduate Certificate in Computational Science provides students a broad knowledge base in problem solving using contemporary computational methods and tools, as well as specialized experience in modeling and solving complex problems in a particular focus area. The certificate will enhance students’ competitiveness whether they pursue graduate school or industry careers.*

* 1. College of Science

IV. Graduate Program (for 2022-23 catalog)

1. Department of Biological Sciences
2. Department of Chemistry
3. **Chemistry, MS APPROVED**

[**https://unt.curriculog.com/proposal:10422/form**](https://unt.curriculog.com/proposal%3A10422/form)

**Proposed: 2022-23 Change in Program**

*Justification: We needed to clarify how many hours of formal lecture would be required for the MS degree. "A graduate major must present credit for at least 30 semester hours. A minimum of 12 hours of formal (lecture) courses are required above the proficiency level."*

*We needed to clarify that a teaching certification prior to admissions or receiving the degree is no longer required.*

*We needed to clarify how many hours of formal lecture would be required for the MS CER concentration. For students doing the thesis option, a minimum of 12 hours beyond Proficiencies must be formal graduate courses, not including seminar courses, are required. For the non-thesis option, the student must present credit for at least 36 semester hours of formal graduate courses, which may include seminar courses, but which cannot include CHEM 6940 (Individual Research) or CHEM 5950 (Thesis) if no thesis is to be written. For the non-thesis degree, a minimum of 18 hours beyond Proficiencies must be formal graduate courses, not including seminar courses.*

1. **Chemistry, PhD APPROVED**

[**https://unt.curriculog.com/proposal:10638/form**](https://unt.curriculog.com/proposal%3A10638/form)

**Proposed: 2022-23 Change in Program**

*Justification: We needed to clarify the formal credit hour requirements. "A minimum of 18 hours of formal (lecture) courses are required above the proficiency level."*

*We have reactivated our Chemistry Education Research option for our Ph.D. program.*

*We needed to clarify that at least one paper on a topic related to the dissertation will have been accepted in or submitted to a peer-reviewed journal by the time of oral defense.*

1. Department of Mathematics
2. Department of Physics
3. Teach North Texas
4. Interdisciplinary Program in Applied and Computational Science
5. College of Science

V. Approve the minutes