University Curriculum Committee
10 March 2005, Meeting Minutes

Members present:
C. Estes, R. Graziani, T. Hudson, R. Mitchelson, M. Schinasi

Guest present:
D. Coltraine

Members Excused:
E. Arnold, L. Kean, D. Long, E. Smith

1)  Approved without dissent the minutes of the 24 February 2005 meeting.

2)  Department of English Professors Richard Taylor, Michele Eble, and Wendy Sharer spoke in favor of new courses: ENGL 3030, ENGL 3040, as well as modifications to their BA in English to allow them as options in their degree. They presented a letter from the School of Communication in support of ENGL 3030. Mitchelson moved for approval, with a second by Graziani. Motion passed without dissent.

3)  Professors Andy Sargent and James Reho spoke in favor of a change in the prerequisite to CHEM 2301. After discussion, Estes moved for approval, with a second by Schinasi. Motion approved without dissent.

4)  Maria Clay and Annette Greer representing the Office of Interdisciplinary Health Sciences Education spoke in favor of a revision to IRHE 2100 and two new courses:
   - IRHE 3100, 3101, 3102: Independent Study
   - IRHE 3500: Designing Interdisciplinary Rural Health Environments

   After discussion, Estes moved for approval, with a second by Graziani. Motion approved without dissent.

5)  The committee discussed changes to the course proposal form for next year. We will vote on changes at our next meeting (March 24th).

6)  Meeting adjourned at 2:35 pm

Minutes submitted by T. D. Hudson
University Curriculum Committee
10 March 2005 Catalog Minutes

CHEM

Insert on pp. 118 < 119 of 2004 < 2005 catalog:

BS in Chemistry

The BS degree in chemistry is the appropriate program for students considering advanced degree programs in chemistry, biochemistry, and other related fields or a professional career in chemistry. Graduates of this program meet certification requirements of the American Chemical Society. Students are strongly encouraged to pursue undergraduate research with a faculty member. Up to 6 s.h. of undergraduate research may be applied toward degree requirements. Information regarding undergraduate research may be obtained from the Director of Undergraduate Studies. Students completing the BS degree are encouraged to consider some of the following courses as electives: COMM 2410 or COMM 2420; ITEC 3290 or ENGL 3820; MATH 2228, 3256, 4331; CHEM 4515, 4516, 4517; advanced 5000-level courses in chemistry; and BIOL 5800 or 5810.

Minimum degree requirement is **126 s.h.** of credit as follows:

1. **General education (See Section 4, General Education Requirements for all Baccalaureate Degree Programs), including those listed below**............................... 42 s.h.
   MATH 1065. College Algebra (3) (F,S,SS) (GE:MA) (P: Appropriate score on mathematics placement test)
   PHYS 1251, 1261. General Physics Laboratory (1,1) (F,S,SS) (GE:SC) (C for 1251: PHYS 1250 or 2350; C for 1261: 1260 or 2360)
   PHYS 2350, 2360. University Physics (4,4) (F,S,SS) (GE:SC) (C for 2350: MATH 2121 or 2171; P for 2360: PHYS 2350)

2. **Core** ........................................................................................................................................... 47 s.h.
   CHEM 1150, 1151. General Chemistry and Laboratory I (3,1) (F,S,SS) (GE:SC) (P: Chemistry placement test or passing grade in CHEM 0150; P/C: MATH 1065)
   CHEM 1160, 1161. General Chemistry and Laboratory II (3,1) (F,S,SS) (GE:SC) (P: CHEM 1150, 1151; C for 1160: CHEM 1161; C for 1161: CHEM 1160; RC: MATH 1083 or 1085)
   CHEM 2103. Introduction to Chemical Literature (1) (WI) (F,S) (P: CHEM 2750)
   CHEM 2250, 2251. Quantitative and Instrumental Analysis (3,2) (WI, WI) (F,S) (P: CHEM 1160, 1161; one organic CHEM course)
   CHEM 2750. Organic Chemistry I (3) (F,S,SS) (P: CHEM 1160, 1161; C: CHEM 2753)
   CHEM 2753. Organic Chemistry Laboratory I (1) (F,S,SS) (C: CHEM 2750)
   CHEM 2760. Organic Chemistry II (3) (F,S,SS) (P: CHEM 2750; C: CHEM 2763)
CHEM 2763. Organic Chemistry Laboratory II (1) (F,S,SS) (P: CHEM 2750, 2753; C: CHEM 2760)
CHEM 2770. Biological Chemistry (3) (F,S) (GE:SC) (P: CHEM 2650 or 2760)
CHEM 3450, 3451. Elementary Inorganic Chemistry and Laboratory (3,1) (WI, WI) (S) (P: CHEM 2250, 2251)
CHEM 3950, 3951. Physical Chemistry and Laboratory I (4,1) (WI, WI) (S) (P: PHYS 1261, 2360; MATH 2173; CHEM 2250, 2251)
CHEM 3960, 3961. Physical Chemistry and Laboratory II (4,1) (WI, WI) (F) (P: CHEM 3950, 3951)
CHEM 4103. Seminar (1) (F,S) (P: Junior or senior standing; CHEM 2103)
CHEM 5350, 5351. Instrumental Analysis (3,1) (WI, WI) (P: CHEM 3960)
CHEM 5550. Advanced Inorganic Chemistry (3) (P: CHEM 3450, 3950)

3. Elective labs (Choose a minimum of 2 s.h. from the following.) ................. 2 s.h.
   BIOL 5821. Principles of Biochemistry Laboratory (1) (F,S) (P/C: BIOL 5800 or 5810)
   CHEM 2111. Applications of Molecular Modeling (1) (F,S) (GE:SC) (P/C: CHEM 2750)
   CHEM 2301. Teaching Laboratory Chemistry (2,0) (F,S) (P: CHEM 1160, 1161 Grade of B or higher in CHEM 1160 and CHEM 1161 or permission of instructor) May count only 1 s.h. toward the 2 s.h. lab requirement
   CHEM 2771. Biological Chemistry Laboratory (1) (F,S) (GE:SC) (C: CHEM 2770)
   CHEM 3301. Practicum in Teaching (1) (F,S) (P: CHEM 2301 and consent of instructor)
   CHEM 4515, 4516, 4517. Research Problems in Chemistry (1,2,3) (F,S,SS) (P: Consent of instructor)
   CHEM 5993. Industrial Internship in Chemistry (3) (P: Selection by joint chem dept/industry screening committee; CHEM 2250, 2760, 3950)

4. Cognates.................................................................................................................. 17 s.h.
   MATH 1085. Pre-Calculus Mathematics (5) (F,S,SS) (GE:MA) (P: MATH 1065 with a minimum grade of C)
   MATH 2171, 2172, 2173. Calculus I, II, III (4,4,4) (F,S,SS) (GE:MA) (P for 2171: MATH 1083 or 1085 or 2122 with a minimum grade of C; P for 2172: MATH 2122 with a minimum grade of C or MATH 2171; P for 2173: MATH 2172)

5. Electives to complete requirements for graduation.

Chemistry Minor

Minimum requirement for the chemistry minor is 25-26 s.h. of credit as follows:

Core .................................................................................................................................. 25-26 s.h.
   CHEM 1150, 1151. General Chemistry and Laboratory I (3,1) (F,S,SS) (GE:SC) (P: Chemistry placement test or passing grade in CHEM 0150; P/C: MATH 1065)
   CHEM 1160, 1161. General Chemistry and Laboratory I (3,1) (F,S,SS) (GE:SC) (P: CHEM 1150, 1151; C for 1160: CHEM 1161; C for 1161: CHEM 1160; RC: MATH 1083 or 1085)
   CHEM 2250, 2251. Quantitative and Instrumental Analysis (3,2) (WI, WI) (F,S) (P: CHEM 1160, 1161; 1 organic CHEM course)
   CHEM 2750. Organic Chemistry I (3) (F,S,SS) (P: CHEM 1160, 1161; C: CHEM 2753)
   CHEM 2753. Organic Chemistry Laboratory I (1) (F,S,SS) (C: CHEM 2750)
   CHEM 2760. Organic Chemistry II (3) (F,S,SS) (P: CHEM 2750; C: CHEM 2763)
   CHEM 2763. Organic Chemistry Laboratory II (1) (F,S,SS) (P: CHEM 2750, 2753; C: CHEM 2760)
   CHEM 3450, 3451. Elementary Inorganic Chemistry and Laboratory (3,1) (WI, WI) (S) (P: CHEM 2250, 2251) or CHEM 3850, 3851. Introduction to Physical Chemistry (4,1) (WI, WI) (F) (P: CHEM 1160, 1161; MATH 2122 or 2172; PHYS 1260, 1261)

Insert on pp. 316 of 2004-2005 catalog:
2103. Introduction to Chemical Literature (1) (WI) (F,S) P: CHEM 2750. Introduces methods used to search and access chemical literature. Development of technical writing skills.

2111. Applications of Molecular Modeling (1) (F,S) (GE:SC) P/C: CHEM 2750. Applications of molecular modeling will be utilized to explore relationships between molecular structure and molecular properties.

2250, 2251. Quantitative and Instrumental Analysis (3,2) (WI, WI) (F,S) 3 lecture and 6 lab hours per week. P: CHEM 1160, 1161; 1 semester of organic CHEM; C for 2250: CHEM 2251; C for 2251: CHEM 2250. Theories and techniques of classical quantitative and modern instrumental analysis.

2301. Teaching Laboratory Chemistry (2,0) (F,S) 1 lecture and 3 lab hours per week. P: CHEM 1160, 1161. Grade of B or higher in CHEM 1160 and CHEM 1161 or permission of instructor. Instruction and supervised experience in methods and practice of teaching introductory chemistry lab.


2651. Organic Chemistry Lab for the Life Sciences (1) (F) 3 lab hours per week. May not count toward CHEM major or minor. May not substitute as a prerequisite for CHEM 2763. C: CHEM 2650. Organic lab techniques.

2750. Organic Chemistry I (3) (F,S,SS) P: CHEM 1160, 1161; C: CHEM 2753. Classes of compounds and their typical reactions, mechanisms, stereochemistry, and instrumental methods in organic chemistry.

2753. Organic Chemistry Laboratory I (1) (F,S,SS) 3 lab hours per week C: CHEM 2750. Organic lab techniques.

2760. Organic Chemistry II (3) (F,S,SS) P: CHEM 2750; C: CHEM 2763. Continuation of CHEM 2750.

2763. Organic Chemistry Laboratory II (1) (F,S,SS) 3 lab hours per week P: CHEM 2750, 2753; C: CHEM 2760. Continuation of CHEM 2753.


2771. Biological Chemistry Laboratory (1) (F,S) (GE:SC) 3 lab hours per week. C: CHEM 2770. Application of chemical lab techniques to study of proteins, carbohydrates, lipids, and nucleic acids.

3301. Practicum in Teaching (1) (F,S) 3 lab hours per week. May be repeated for credit. May count maximum of 4 s.h. toward CHEM major. P: CHEM 2301 and consent of instructor. Supervised practicum in teaching introductory chemistry lab.

3450, 3451. Elementary Inorganic Chemistry and Laboratory (3,1) (WI, WI) (S) 3 lecture and 3 lab hours per week. P: CHEM 2250, 2251; C for 3450: CHEM 3451; C for 3451: CHEM 3450. Modern chemical principles, periodic properties, and reactions of elements.

3501, 3502, 3503. Special Topics in Chemistry (1,2,3) May be repeated for maximum of 6 s.h. with change of topic. May not count toward general education science credit. P: CHEM 1160; consent of instructor. Selected topics of contemporary interest.

3850, 3851. Introduction to Physical Chemistry (4,1) (WI, WI) (F) 4 lecture and 3 lab hours per week. P: CHEM 1160, 1161; MATH 2122 or 2172; PHYS 1260, 1261; C for 3850: CHEM 3851; C for 3851: CHEM 3850. Physical chemistry for students with a limited mathematical background.

3950, 3951. Physical Chemistry and Laboratory I (4,1) (WI, WI) (S) 4 lecture and 3 lab hours per week. P: PHYS 1261, 2360; MATH 2173; CHEM 2250, 2251; C for 3950: CHEM 3951; C for 3951: CHEM 3950. Theoretical and mathematical treatment of fundamental laws and theories underlying science of chemistry.

3960, 3961. Physical Chemistry and Laboratory II (4,1) (WI, WI) (F) 4 lecture and 3 lab hours per week. P: CHEM 3950, 3951; C for 3960: CHEM 3961; C for 3961: CHEM 3960. Continuation of CHEM 3950, 3951.
IRHE 2100. Rural Health Immersion (2 3) P/C: IRHE 2000 or permission of instructor. Intensive immersion experience with rural health care teams; apply knowledge and skills for effective communications with patients and health care professionals; and review health issues in rural environments.

IRHE 3100,3101,3102. Independent Study (1,2,3) P: Permission of instructor. Supervised learning experience of a concentrated community immersion or an individual topic of study which is reported on in writing and orally. Student responsible for transportation as applicable.

IRHE 3500. Designing Interdisciplinary Rural Health Environments (3) (S) Apply knowledge of interdisciplinary rural health teams and rural environments to the design of rural interdisciplinary health care.