

University Curriculum Committee

Minutes # 11

January 19, 2022

Members Present: Califf, Jia, Pierce, Kalter, Leonard, Falbe, Kroesch, Newport, Carlson, Hurd, Meyers, Hunter, Howell, Duffy, Johnston, Paolucci, Pence

Members Absent: Sessom, Sammons

Guests: Ian Gawron – Registrar’s Office, Danielle Lindsey – Registrar’s Office, Maochao Xu – Mathematics Department, Pei Geng – Mathematics Department, David Marx – Physics Department, Daniel Holland – Physics Department, Papa Sissokho – Mathematics Department, Jess Ray – Registrar’s Office.

1. Convene: Califf convened the UCC meeting

2. Introductions:

3. Approval of Minutes:

It was briefly explained that updated minutes were sent out earlier in the day after a few edits were requested. The minutes were approved.

4. Proposed Discussion and Action:

a. Biophysics Sequence

Jia and Falbe highlighted the rationale indicating that Biophysics is well established in the field of physics. Falbe/Jia explained that the courses were approved, the copy appeared clear, that the prerequisites appeared to be consistent/noncontradictory, and that the total hours added up correctly. Falbe/Jia alluded to the MAT 144/145 agenda item indicating that this program does include MAT 145, but not MAT 144. Califf briefly explained that there were issues affecting some departments/programs when MAT 144 was forced to be counted in the total hours of the program. Califf indicated, along with Hurd, that multiple departments/stakeholders met concerning this issue and it was generally resolved by counting the most pertinent MAT course that was also a general education course. In some program’s cases, it is MAT 145. It was generally alluded to that the STAR Act may change how this is counted in the future. Falbe asked about the library approver line. Marx (guest) indicated that he reached out to library staff/faculty and that they were included. Kalter asked about why more science and math is recommended if a student already has language proficiencies. Marx (guest) and Holland (guest) indicated that biology had to be taken out to fit the language currently in place, and that, for graduate programs, more science and math is more applicable. Kalter asked about the Gawron (guest) rejection of the proposal previously and how it was over 120 credit hours and due to inactivity. Hurd explained that the proposal was over 120 credit hours for a considerable amount of time and that this is standard practice. Jia motioned a vote of approval. Falbe seconded. All voted in favor. 0 against. 0 abstentions. Below is the approved catalog copy:

Major in Physics (B.S.)

Biophysics Sequence

Major Requirements

Minimum required credit hours: 91 (39 credit hours in PHY required)

PHY 107
PHY 110
PHY 111
PHY 112
PHY 202
PHY 217
PHY 220
PHY 240
PHY 270
PHY 284

PHY 371
BSC 196
BSC 197
BSC 203
BSC 343
BSC 350
CHE 110/CHE 112
CHE 220
CHE 242
MAT 145
MAT 146
MAT 147
MAT 175
MAT 340

Take 1 of the following courses:

BSC 283
BSC 219

Take 1 of the following courses:

PHY 340
PHY 384
3 hours of 300-level Physics electives

Notes:

Students completing this major in 8 semesters must initially place into MAT 145. Placing below MAT 145 will extend time to degree completion.

b. Data Science and Computational Mathematics Sequence

Falbe/Jia explained that this new program is looking to combine math and information technology disciplines and that the concentrations are present to specialize further. Falbe did ask about potential prerequisite concerns on some of the course elective options. This discussion, overall, concluded that perhaps some of the prerequisites should be reassessed, but are not technically problematic due to other course options being available to satisfy the requirement. However, other concerns were raised about being upfront about course options, and various total hour considerations. This discussion included: Falbe, Califf, Gawron (guest), Lindsey (guest), Xu (guest), Hurd, Kalter, Johnston. Newport asked about the library approver question and, given that he is the librarian for these disciplines, he had not heard of this new program. Geng (guest) indicated that, given no new courses were being created, that it was generally assumed that no new materials would be needed from the library. Johnston highlighted potential total hour concerns alluded to previously – the sample plan of study indicated courses that were not in the program as required or as an elective, which implies they are required, but not being counted in the program. This discussion topic primarily included: Califf, Kalter, Jia, Sissokho (guest), Gawron (guest). Hurd indicated that the sample plan of study concern can be quickly resolved by working with the advisor to make edits. It was generally concluded that the sample plan of study should change to not list specific courses unless they are required. It was briefly discussed inquiring about two separate sequences versus having one but with concentrations. It was concluded that one sequence with the concentrations was more attractive for students. This discussion included: Jia, Califf, Sissokho (guest), Xu (guest), Geng (guest), Myers, Duffy. It was also briefly discussed about when this program is looking to take effect, and if the staffing/student search is occurring. Xu (guest) indicated that the searching is beginning, and the staff is present. Lindsey (guest) inquired and clarified the next steps for this proposal. Califf responded indicating that the proposal will most likely be sent back on revision so that the department can make the changes. Falbe motioned a vote of approval pending editorial changes to the sample plan of study. Jia seconded. 15 voted in favor. 2 abstained (Pierce, Califf). 0 against. Below is the approved catalog copy:

Copy for the Course Requirements page for the Data Science and Computational Mathematics Sequence

Degree Offered: B.S.

Major Requirements

Minimum required credit hours: 59 (min. of 45 credit hours of Mathematics courses)

- IT 166
- IT 168
- IT 179

- IT 180
- IT 279
- MAT 144
- MAT 145
- MAT 146
- MAT 147
- MAT 175
- MAT 252
- MAT 260
- MAT 350

Complete the Data Science or the Computational Mathematics concentration

Data Science Concentration (min. of 17 additional credit hours)

- MAT 351
- MAT 355

Take a minimum of 3 courses (9 credit hours) from the following

- IT 244
- IT 348
- IT 352
- MAT 353
- MAT 354
- MAT 356
- MAT 443
- MAT 450
- MAT 453
- MAT 455
- MAT 456
- MAT 458

Computational Mathematics Concentration (min. of 13 additional credit hours)

- MAT 363

Take at least 3 courses from the following with a minimum of 2 courses from Group 1

Group 1

- IT 244
- IT 326
- IT 328
- MAT 236
- MAT 247
- MAT 268
- MAT 337
- MAT 340
- MAT 361
- MAT 362

Group 2

- MAT 351
- MAT 355
- MAT 443
- MAT 455

Note: Only seniors with good standing will be allowed to take a graduate-level course (courses numbered 400 or higher), provided the Graduate School gives approval. IT courses are not counted towards the min. of 45 credit hours required in Mathematics courses.

5. Liaison Assignments:

a. Council for General Education – Report will be presented next UCC meeting due to time constraints

b. Council for Teacher Education – Kroesch/Hurd briefly explained that teacher education changed the gateways from three to two, which leads to changes to prerequisites for various courses. Hurd explained all these changes are editorial and does not pass through the UCC.

c. Academic Affairs Committee – Report will be presented next UCC meeting due to time constraints

6. Staff Report:

Nothing.

7. Miscellaneous:

MAT 144/145 Update – Califf/Hurd – Most of this was explained previously under the Biophysics section of the minutes. This was expanded where Califf/Hurd explained that previously approved proposals (primarily Information Technology and Chemistry) are hoping to be edited to remove MAT 144 related information that is now not being counted. Kalter inquired about the STAR audit and implications of one. Hurd explained that a STAR audit can range from having a significant amount of time to fix a potential issue versus having to fix a potential issue quickly. It was generally mentioned that no public universities have been audited on this yet and that it is a bit of uncharted territory. Given time constraints, Califf prompted the UCC members to think on this, and a vote will take place at the next UCC meeting. Lindsey (guest) inquired about the mode of remedying this situation and that, if the affected departments are going to submit editorial requests to remove MAT 144, that the deadline is January 26th, and that they should try to move quickly to submit these editorial requests.

8. Adjournment:

The UCC adjourned approximately 4:35 pm.