

University Undergraduate Academic Council
February 6, 2019
3:30 p.m. – 5:00 p.m.
CEHS Dean's Conference Room

Present: K. Witemeyer, J. Smith, B. Burton, R. Ashlock, D. Williams, M. Daugherty, M. Delony, P. Roggendorff, S. Stewart, D. McNulty

Absent: S. Hamm

Ex-officios: E. Gumm, B. Fang, M. Long, K. Pybus

Guests: T. Kennedy, J. Dowdy, D. Pemberton, J. Camp

The meeting began at 3:30 p.m.

I. Call to order by J. Smith.

II. Prayer by B. Burton.

III. Approval of the minutes from 12.5.18

Motion to approve the minutes by M. Daugherty; seconded by R. Ashlock; all in favor; motion passes.

Information Items:

- IV. ENGR 210 – Revise Co/Prerequisites
- V. ENGR 211 - Revise Description and Co/Prerequisites
- VI. ENGR 422 and 423 - Revise Prerequisites

VII. Physics Minor – Revise Courses and Total Hours

J. Dowdy - We revised this so that an engineering major could get a physics minor. This would incentivize engineering students to take other physics courses. Students are interested in earning a minor. I think this will be a positive change that students will be interested in pursuing. B. Burton - This is actually an information item. J. Smith - You are correct. So no vote is needed.

Action Items:

VIII. PHYM – Medical Physics - Revision of Major

J. Dowdy - In talking with schools that offer this program, we learned that we needed to have more physics and less medical-related coursework. Students will go on to medical physics fields instead of going into medical school. This will better prepare them for graduate school. R. Ashlock - What is the demand for this program? J. Dowdy - We have 3 students currently. M. Daugherty - It is a small program that we are looking to grow. There is a huge demand in the job market, but students are not aware of that yet. D. McNulty - What would be the effect for student who still want to pursue pre-med? J. Dowdy - We don't currently have any students pursuing pre-med.

Motion to approve by S. Stewart; seconded by D. McNulty; all in favor; motion passes.

IX. PHYS 204 – Physical Science for Teachers Laboratory – New Course

J. Dowdy - This course has been taught several times as a special topics course. This course originated at the request of the education department to provide hands-on activities for education majors. This is a way to better prepare students for the national exam. D. Pemberton - EC-6 candidates are certified for everything. If our candidates will be teaching this material, they need that lab component. A lab is already embedded in CHEM 203. This addresses it for Physics. J. Smith - How many times has this been taught as special topics? J. Dowdy - Four or five? B. Burton - So the lab will accompany PHYS 203? J. Smith - Yes. D. Pemberton - I would say this is critical for our students. D. McNulty - So can students still take PHYS 203 as a stand-alone course without the lab? J. Dowdy - Yes. We have students taking it for general education credit.

Motion to approve by M. Daugherty; seconded by D. McNulty; all in favor; motion passes.

X. IDSC – Early Childhood/Elementary Education – Add PHYS 204

J. Smith - We've heard how critical you believe this course addition is. D. Pemberton - I would like to have this added to the degree plans retroactively. We've been forcing our students to take this course anyway. E. Gumm - It is not an issue for the transcript, and advising seems to be taking care of it. D. Pemberton - How clear is it for students? E. Gumm - Students can be moved to the new catalog. D. Pemberton - Our current freshmen would be affected by this. Some sophomores as well. J. Smith - If the state has requirements, our department has a way to continue to enforce that without making a retroactive change. There are ripple effects with retroactive changes, and we can't always see student impact. D. Pemberton - We are going to make them take this course whether or not we make the change officially retroactive. So the main question is clarity to students as they look at their degree audits.

XI. MSSED/MSSC – Middle School Education Science – Add PHYS 204

See above and below.

Motion to approve X-XI by B. Burton making it retroactive to 2017-18; seconded by Sam Stewart; all in favor; motion passes.

XII. SPEL – Special Education – Add PHYS 204 and EDUC 323

D. Pemberton - The EDUC 323 course was omitted accidentally when we revised this degree. When the CORE strictures reduced, we added this course back into our other special education program, and we failed to add it to this program at that time. It makes the major tight with 130 total hours and no electives, but it is the equivalent of a degree and a minor together to comply with all government requirements. We can leave the retroactive feature off of this one. It impacts 4-5 students a year.

Motion to approve (with no retroactive component) by M. Daugherty; seconded by B. Burton; all in favor; motion passes.

XIII. All 4-8, 7-12, and EC-12 Certification Degree Plans – Expand EDUC 221 Requirement into a Menu Including EDUC 221, PSYC 120, and PSYC 232

J. Smith - This affects programs across many different departments across campus. D. Pemberton - We have lost faculty and cannot offer as many sections of EDUC 221 as we need for our students. This adjustment is not ideal, but we believe these other courses do address those standards that we need. We are asking that these courses be taken in residence. This is consistent with our professional education piece. E. Gumm - It is challenging to enforce this. We don't have a way to not equate the transfer credit. Those equivalencies are already set up. It is theoretical that a student could take a PSYC 120 AP exam and it would fulfill the University Requirement but not the degree requirement. This will cause a lot of confusion for students. There are different advisors across campus for these various programs, and it will be hard to ensure consistent communication to students from all of them. J. Smith - Can another university offer a course at a level that we would accept? S. Stewart - What if we remove PSYC 120 and only leave PSYC 232? D. McNulty - I would think PSYC 241 (Cognition and Learning) would be a better fit than PSYC 120. J. Smith - If we want to amend to add 241, we need to table this. K. Witemeyer - CLEP testing is also an issue.

Motion to table by S. Stewart; seconded by M. Daugherty; all in favor; item tabled.

XIV. BSE – Engineering – Restructure Degree and Add Tracks

T. Kennedy - As part of our accreditation process, we get feedback to inform our curriculum. We are hearing that our students need more depth in particular areas.

We've looked at research to see where the field is growing as well as the capability of our faculty. We were already offering electives in electrical and mechanical engineering. We would like to restructure our program to have a more streamlined core and focused concentrations. D. McNulty - I see a lot of courses are offered in alternate years - do you have the staffing to support this change? T. Kennedy - We do. We have local adjuncts that can assist as well. R. Ashlock - Do you expect this to help grow the program? I would guess this would make the program much more attractive to students. T. Kennedy - Yes. We are seeing this request from students and parents. Looking at our sister institutions, we think this will help us be more competitive. J. Smith - Changing this to full degrees would require differences with accreditations. T. Kennedy - All our students take a standardized exam, and our students have a 100% pass rate. So our students are well-prepared. This will only help. J. Smith - What is the general popularity level with what we currently offer? T. Kennedy - We follow the national average. Mechanical is the most popular. P. Roggendorff - Why these particular tracks? What is the outlook of all five of these as far as enrollment? T. Kennedy - These were chosen by looking at national norms. It also is affected by the faculty that we have on staff. Civil Engineering and Industrial Engineering have the best career outlook. There are some courses that overlap between the tracks as well. Our students tend to follow the national trends.

Motion to approve by D. McNulty; seconded by P. Roggendorff; all in favor; motion passes.

XV. ENGR 131 – Reduce Credit Hours from 3 Lecture to 1 Lab

No specific discussion.

XVI. ENGR 360 – Create a Cross-Listed Course Matching PHYS 360

No specific discussion.

Motion to approve items XV-XVI by D. McNulty; seconded by R. Ashlock; all in favor; motion passes.

XVII. ENGR 221 – Statics and Dynamics – New Course – BSE Core

No specific discussion.

XVIII. ENGR 377 – Statistics for Engineers– New Course – BSE Core

D. McNulty - We do have statistics in other departments. Is this needed? T. Kennedy - Math doesn't have the capacity for our students and have actually encouraged us to create our own.

Motion to approve items XVII-XVIII by S. Stewart; seconded by D. Williams; all in favor; motion passes.

XIX. ENGR 272 – Surveying and Geomatics – New Course – CE Track

T. Kennedy - There are individual specialty fields within this overall concentration. We give the students a taste of each.

XX. ENGR 370 – Structural Analysis – New Course – CE Track

XXI. ENGR 372 – Soil Mechanics – New Course – CE Track

XXII. ENGR 373 – Engineering Field Methods Lab – New Course – CE Track

XXIII. ENGR 376 – Water Resources Engineering – New Course – CE Track

XXIV. ENGR 378 – Introduction to Environmental Engineering – New Course – CE Track

XXV. ENGR 470 – Design of Structures – New Course – CE Track

Motion to approve items XIX - XXV by R. Ashlock; seconded by M. Daugherty; all in favor; motion passes.

XXVI. ENGR 387 – Power Electronics and Electromechanics – New Course – EE Track

XXVII. ENGR 410 – Signal Processing – New Course – EE Track

Motion to approve items XXVI - XXVII by S. Stewart; seconded by D. Williams; all in favor; motion passes.

XXVIII. ENGR 251 – Engineering Management – New Course – IE Track

XXIX. ENGR 321 – Introduction to Manufacturing Engineering Lab – New Course – IE Track

D. McNulty - I was interested on why this is an introductory course that is 300-level. T. Kennedy - This is the first course in a specific field. They have their general introduction already. This is a standard practice across other institutions.

XXX. ENGR 351 – Statistical Quality Control – New Course – IE Track

XXXI. ENGR 352 – Engineering Optimization – New Course – IE Track

XXXII. ENGR 353 – Management Systems and Production Planning – New Course – IE Track

XXXIII. ENGR 450 – Systems Simulation – New Course – IE Track

Motion to approve items XXVIII - XXXIII by S. Stewart; seconded by D. Williams; all in favor; motion passes.

XXXIV. ENGR 322 – Advanced Dynamics – New Course – ME Track

XXXV. ENGR 331 – Fluid Mechanics Lab – New Course – ME Track

XXXVI. ENGR 338 – Design of Machine Elements – New Course – ME Track

XXXVII. ENGR 435 – Finite Element Analysis – New Course – ME Track

D. Anulty - I did not see any texts on the syllabus only course notes. T. Kennedy - The textbooks that are available are at the graduate level. This is a hands-on lecture/lab course. Our faculty plans to go from his personal expertise. P. Roggendorff - There is a text listed in the new course application and not the syllabus.

XXXVIII. ENGR 436 – Systems and Controls – New Course – ME Track

Motion to approve items XXXIV-XXXVIII by S. Stewart; seconded by M. Daugherty; all in favor; motion passes.

Meeting ended at 4:48 p.m.