University Senate Agendas, 2015-2016
All meetings are from 3:00-5:00 pm in the Auditorium of W. T. Young Library unless otherwise noted.

## Monday, March 21, 2016

1. Minutes from February 8, 2016 and Announcements
2. Officer and Other Reports
a. Chair
b. Vice Chair
c. Parliamentarian
d. Trustee
3. Committee Reports
a. Senate's Academic Programs Committee (SAPC) - Margaret Schroeder, Chair
i. New University Scholars Program: BA English and MA English
ii. New Master of Public Financial Management
iii. New Graduate Certificate in Public Financial Management
iv. New Graduate Certificate in Improving Healthcare Value
b. Senate's Admissions and Academic Standards Committee (SAASC) - Scott Yost, Chair
i. Proposed Changes to Admissions and Academic Standards for All Nine BS

Degree Programs in Engineering, Following the Introduction of the New FirstYear Engineering Curriculum

1. Nine Associated BS Program Changes (Biosystems Engineering, Chemical Engineering, Civil Engineering, Computer Engineering, Computer Science, Electrical Engineering, Materials Engineering, Mechanical Engineering, Mining Engineering)
ii. Standard of Evidence in Academic Offenses - Proposed Changes to Senate Rules 6.4 ("Academic Offenses and Procedures")

University Senate Agendas, 2015-2016
All meetings are from 3:00-5:00 pm in the Auditorium of W. T. Young Library unless otherwise noted.
c. Senate's Rules and Elections Committee (SREC) - Connie Wood, Chair
i. Proposed Revision to SenateRules 1.5.2 ("Election: Two Voting University Faculty Members, Board of Trustees")
4. Title IX Language - Proposed Addition to Syllabus Template/ Guidelines
5. Proposed Changes to Administrative Regulations 3:2 ("Phased Retirement Policy and Program")
a. History and Proposed Changes
6. Registered Investment Advisor (RIA) Fee Cap Proposal - J oey Payne, Chief Benefits Officer
7. Other Business (Time Permitting)

Next Meeting: April 11, 2016

> University Senate February 8, 2016

The University Senate met in regular session at 3 pm on Monday, February 9, 2015 in the Athletics Association Auditorium of W. T. Young Library. Below is a record of what transpired. All votes were taken via electronic voting devices unless indicated otherwise; specific voting information can be requested from the Office of the Senate Council.

Senate Council Chair Andrew Hippisley called the University Senate (Senate) meeting to order at 3:00 pm. He reminded senators to pick up their clickers.

The Chair called for an attendance vote and 68 senators registered their presence.

1. Minutes from December 14, 2015 and Announcements

The Chair reported that no corrections were received. There being no objections, the minutes from December 14, 2015 were approved as distributed by unanimous consent.

The Chair offered a handful of announcements.

- The March Senate meeting will be on third Monday in March (March 21), not the second Monday. (The second Monday in March is the week of spring break.)
- Two web transmittals were currently posted and the Chair asked senators to review the courses, programs, and University calendars.
- A celebration of the Chinese New Year will be held at the Boone Center on February 8 from 57pm. It is sponsored by UK's Confucius Institute.
- There will be a forum on Public Art on Monday, March 21 in the W. T. Young Library Auditorium at 6:30 pm.
- The Chair is co-chairing the Unconscious Bias faculty sub-committee with Sonja Feist-Price (ED/ Early Childhood, Special Education, \& Rehabilitation Counseling, associate provost for faculty advancement). If anyone would like more information about the Unconscious Bias group or would like to serve as a trainer, please email Feist-Price.


## 2. Officer and Other Reports

a. Chair

The Chair welcomed the new student member of Senate Council, Armanee Doyle (AS), who replaced Sara Biery.

The Chair announced that an advisory committee to review the proposal for the Lewis Honors College was up and running. The members is comprised of Sue Roberts (AS), chair; Kim Anderson (EN); David Royster (AS, Senate Council representative); Bruce Webb (AG, Senate Council representative); James Holsinger (PbH); Francisco Andrade (ME); Anna Brzyski (FA); and Beth Kraemer (LI).

The SC appointed Buck Ryan (CI) to replace Kathy Swan (ED) as the faculty members serving on the Senate's UK Core Education Committee, specifically for the area of Culture and Citizenship.

The SC approved University calendar changes for commencement for the 2017-18 calendar. The SC also approved a deviation from the standard calendar, for course PA 681. The SC also approved a waiver of Senate Rules (SR) 5.2.4.8.1 ("Common Exams") for course CHE 230-001.
b. Vice Chair

Vice Chair McCormick (ED) was out of the country and therefore did not give a report.

## c. Parliamentarian

Parliamentarian Kate Seago (LI) explained what happens if a chair of a body steps down temporarily because they wish to speak for or against an agenda item. A chair is typically neutral but when the chair cannot remain neutral, the chair will identify a hair pro tem to run the meeting during the time when the chair would like to express an opinion. The duty of serving as chair pro tem usually is the responsibility of the vice chair, but because the Senate's vice chair was not present, the Chair can temporarily appoint another member of the body to step in during that time period. There were no questions from senators.

## d. Trustee

Trustee Wilson (ME) said he had nothing to report but was willing to entertain questions. There were no questions for trustees Wilson or Grossman (AS).

## 3. Update on University Budget - President Eli Capilouto and Executive Vice President for Finance and Administration Eric Monday

President Eli Capilouto began by thanking the Chair and senators for their service to UK. He gave a presentation to senators regarding the recently proposed budget cuts from the state. When he was finished with his presentation, senators gave him a round of applause and he proceeded to answer questions from senators.

Grossman (AS) noted that in the past, the administration had directed employees not to contact their legislators about budgetary issues - he asked if the same held true for the present budget issues with Frankfort. The President replied that he was not yet prepared to ask employees to contact their legislators, but a message would be crafted in the near future to campus offering suggestions on how employees could help. Tagavi (EN) noted that while the President offered information about one thing that he would not do (would not have across-the-board cuts), he wondered if there were other things that the President would not do, such as not lay off staff, would not deny tenure, etc. President Capilouto said that the University would not rush to any of those areas, saying that it was better to talk about how much UK has grown over the last few years, including growth since the same time last year. He said he preferred to concentrate on UK's successes before focusing on cutting anything. Blonder ( ME ) said that some faculty are on a listserv for higher education in the Commonwealth and had seen emails about students and parents protesting the proposed cuts, or holding some other type of demonstration in Frankfort. The President said he was unaware of those activities and asked Blonder to forward him that information.

Debski (AS) said that she had heard that higher education leaders had not had much warning that these budget cuts would be coming. She asked if the President knew the extent to which Governor Matt Bevin would consult with higher education leaders about the budget and about performance-based funding. President Capilouto replied that current conversations were ongoing, although some of the most important conversations were not ones that people could read about in the newspaper. He said that legislators were engaged with UK's leadership and were willing to hear what he had to say; he was
encouraged by those relationships. Vasconez (ME) asked if the cuts were proportionate among all the institutions of higher education in Kentucky, wondering if UK would be pitted against the other universities in the state for funding. The President replied that the cuts were pretty much across the board to the state's higher education institutions. University presidents had previously gotten together and although it took a while, eventually all agreed on a set of performance metrics that were appropriate for each university - each university would more or less be competing against itself. The current challenge was trying to understand what metrics would be acceptable to Governor Bevin and other leaders in Frankfort - the beauty of the previously designed metrics was that they were simple and to the point, but had compelling outcomes that universities wanted to pursue. The issue now was trying to understand what the right metrics would be - basing all funding on performance would introduce too much uncertainty into what each university strives to accomplish.

Cross (CIE) commented that there were really two issues at play - the cuts (for this fiscal year and the euts to come-in subsequent fiscal years) and performance-based funding in future years. Cross asked if the President had any encouraging information about for either-cut. The President said that the Governor had put together his budget in just a few weeks, after which the Kentucky House of Representatives started hearings to try to understand the Governor's proposed budgetit all. Until more people are better acquainted with the details of the budget, President Capilouto said it would be difficult to answer Cross's question.

Brion (EN) commented that some states have enacted laws that remove the state's oversight of certain aspects of higher education institutions if the state's funding for those institutions falls below a certain level. Brion wondered if or when the state's funding for UK would become irrelevant. The President said the $\$ 280$ million from the state was not a trivial amount - he commented that 2,000 individuals would need to donate $\$ 1$ million each to equal that amount of funding. Lee noted that none of the discussions he had heard yet included reference to UK's unique mission as a land-grant institution - he wondered if that had been discussed in relation to state support of UK. President Capilouto said that it was a hard metric to evaluate and there were all kinds of ways to measure success in those areas. Lehman (BE, student) asked what students could do to help. The President commented that it would work best to have a unified message coming from multiple voices - he said he would be in touch with the campus about what opportunities were available for contacting legislators. He thanked Lehman for being so engaged.

Schroeder (ED) referred to news articles stating that the $4.5 \%$ cut for this fiscal year might be spread out beyond this fiscal year - she asked if there was any additional information available about a delay in returning those funds. The President did not have additional information to explain how that might work. He said the $4.5 \%$ cut from Governor Bevin was within the Governor's authority to enact, but said the Governor had expressed willingness to work with institutions on returning that $4.5 \%$. The President said he was encouraged by the Governor's flexibility. Sachs (AS) said he had more of a comment than a question - although K-12 education was not hit with budget cuts, he wondered if the chilling effect of the budget cuts on higher education would have a negative impact on K-12 education. The President commented that both education sectors were intertwined and that he hoped the state would facilitate making students knowledgeable, wise, and have what they need to be prepared when they get to UK. President Capilouto added that the areas held harmless by the budget cuts (e.g. prison guards, pensions, and social workers) were very respectable areas to protect and said he was mindful that in many ways, everyone is in this situation together.

Grossman asked if UK would lobby for tax reform. The President responded that elected officials really needed to hear from their constituents about that type of matter. UK faculty had testified in front of the last tax reform commission meeting and did offer opinions at that time. Whitaker asked if the proposed budget cuts would have any effect on UK's accreditation by the Southern Association of Colleges and Schools - Commission on Colleges (SACS) and the President replied that in time it could, but not in the immediate future. He said that he had greater respect for UK's accrediting body and that it helps UK to be an excellent institution. Sandmeyer referred to some of the President's remarks earlier in his address and wondered what effect the proposed cuts would have on tuition rates. President Capilouto replied that in the last four years, UK had really tempered its tuition increases. If one compares UK to institutions around the country, the President opined that UK represents an incredible value. UK has a mix of students, with the doors open widest for Kentuckians. Thirty-five percent of all those admitted are KY Pell Grant recipients and non-residents on average pay double the tuition of in-state students, which also helps UK's bottom line. Furthermore, $53 \%$ of UK's graduates have no debt upon graduation and for those with debt, the debt averages to be about $\$ 26,000$. After a recent evaluation, UK found that out of 6,000 graduates, less than 200 graduates had a lot of debt, although many of them were in high-paying first jobs. President Capilouto did note that the proposed budget cuts would put pressure on UK's tuition and fees.

## 4. Committee Reports

a. Senate's Academic Programs Committee - Margaret Schroeder, Chair
i. Proposed Suspension of BS Spanish

Schroeder (ED), chair of the Senate's Academic Programs Committee (SAPC), explained the proposal. The Chair said that the motion from SAPC was that the University Senate approve the suspension of admission into the existing BS Spanish, in the Department of Hispanic Studies within the College of Arts \& Sciences. Because the motion came from committee, no second was required. Fiedler (AS) said it was his understanding that every major in the College of Arts and Sciences had both a BA and BS offering. Guest Ruth Beattie (AS/Biology, associate dean for advising) explained that particular requirement was changed a few years ago. There being no further questions, a vote was taken and the motion passed with 87 in favor and one opposed.
ii. Deletion of Dramatics and Speech Education Teacher Certification Program

Schroeder (ED) explained the proposal. The motion from the SAPC was a recommendation that the University Senate approved the deletion of the Dramatics and Speech Education Certification Program in the Department of Curriculum and Instruction within the College of Education. Because the motion came from committee, no second was required. There were no questions from senators. A vote was taken and the motion passed with 87 in favor and none opposed.
iii. Graduate Certificate in College, Career, and Civic Life (C3) Teaching and Learning Certificate Schroeder (ED) explained the proposal. The motion from the SAPC was that the University Senate approve the establishment of a new Graduate Certificate in College, Career and Civic Life Teaching \& Learning Certificate, in the Department of Curriculum and Instruction within the College of Education. Because the motion came from committee, no second was required. Kennedy commented that the motion used the term "certificate" twice. On behalf of SAPC, Schroeder accepted as a friendly amendment Kennedy's suggestion to drop the second use of the word. Mazur, the contact person, agreed to the change.

There being no further discussion, a vote was taken on the motion to approve the establishment of a new Graduate Certificate in College, Career and Civic Life Teaching \& Learning, in the Department of

Curriculum and Instruction within the College of Education and the motion passed with 89 in favor and none opposed.

## b. Senate's Academic Organization and Structure Committee (SAOSC) - Ernie Bailey, Chair

i. Proposed Name Change of the Department of Health Behavior to the Department of Health, Behavior \& Society
Bailey (AG), chair of the Senate's Academic Organization and Structure Committee (SAOSC), explained the proposal. The motion from the SAOSC was that the University Senate endorse the change of name from Department of Health Behavior to Department of Health, Behavior \& Society within the College of Public Health. Because the motion came from committee, no second was required. There were no questions or comments from senators. A vote was taken and the motion passed with 83 in favor, two opposed, and one abstaining.

The Chair noted that he was the contact person for the next agenda item and was therefore handing over the responsibility of the Chair to Kraemer (AS), the incoming vice chair. Kraemer left his seat and moved to the front of the room.
ii. Proposed New Department of Linguistics and Move of the Minor in Linguistics, BA/BS Linguistics, and MA in Linguistic Theory and Typology to the Proposed New Department
Bailey (AG) explained the proposal. The motion from the SAOSC was that the University Senate endorse the establishment of a Department of Linguistics within the College of Arts \& Sciences and the transfer of the BA/BS in Linguistics, the MA in Linguistic Theory \& Typology, and the Minor in Linguistics to the new Department of Linguistics. Because the motion came from committee, no second was required.

There were no questions from senators. A vote was taken and the motion passed with 85 in favor and two opposed.

Kraemer returned to his seat and the Chair returned to the podium.
c. Senate's Admissions and Academic Standards Committee (SAASC) - Scott Yost, Chair
i. Excused Absences vs Unexcused Absences: Contradiction in Senate Rules 5.2.4.2

Yost (EN), chair of the Senate's Admissions and Academic Standards Committee (SAASC), explained the proposal. There was extensive discussion, approximately 45 minutes, about the proposal. Tagavi (EN) objected to the proposed change, stating that it was not appropriate to force a professor to give an "l" grade. There were additional comments and clarifications. Grossman (AS) confirmed that the language about requiring a student to petition for a "W" was removed, but the instructor did not have the power to require a student to petition for a W - a professor cannot force a student to do anything. The faculty member could advise, or advise strongly, but the faculty member could never force a student to take a W - that provision was completely unenforceable. After additional discussion, Tagavi stated that an I grade was a penalty. Healy (LA, academic ombud), explained that there was no mechanism in the current rule for an instructor to insist a student take a $W$ in the course if they exceeded the 20\% rule. The SAASC looked at resolving that in the initial proposal by saying that with the consent of the day, a student is given a W in the course if that is what the instructor requested. There was an objection to that language, saying that it went against student rights in terms of not receiving a penalty for excused absences. Healy opined that at the end of the day, you must do something in these circumstances and SAASC came up with the most acceptable language, which also did not include the misleading statement about demanding a W . There was no mechanism for demanding a W , so the virtue of the proposed current language was that it was not misleading. Whether or not someone believes an I or a W is a
penalty is a matter of opinion, but the proposed language, in Healy's opinion, was the only feasible remedy in the described circumstances.

The Chair said that the motion from the SAASC was that the Senate approve the revisions to SR 5.2.4.2 ("Excused Absences"). Because the motion came from committee, no second was required. Tagavi (EN) asked for the rationale behind changing the language. Yost replied that it was not a matter of legality, but rather that Healy, in his role as ombud, identified a handful of grey areas that he was having to address repeatedly and were the root of multiple appeals to the University Appeals Board (UAB). Based on Healy's ombud report to SC, the SC asked SAASC to clarify the language. SAASC worked with Healy to come up with clarifying language to keep the $20 \%$ in place so there was a mechanism available to deal with a student who cannot complete the course due to excused absences.

Tagavi (EN) moved that the proposal return to the language that says a professor can require a student to apply for a W . The motion died due to lack of a second. There was additional discussion among senators about other possible language. Whitaker (AS) spoke against the amendment, preferring the original language and saying that he had not heard any alternative language that addressed the situation better.

Sandmeyer (AS) moved to remove the phrase, "if the student declines to receive a "W"" from the paragraph about excused absences, as it was unnecessary. Brion (EN) seconded. Wood spoke in favor of the amendment but suggested that the phrase immediately prior ("or the Instructor of Record may award an "I" for the course") was also unnecessary because a faculty member always has that option. Sandmeyer and Brion accepted Wood's suggestion as a friendly amendment. There were additional comments from senators. Healy noted that while it was perhaps redundant, it was also helpful in explaining the available options. Bird-Pollan (LA) commented that it seemed there was also a third option - a faculty member could give a student a letter grade if the student earned it. Yost (EN) confirmed that other language in the Senate Rules [not part of the proposal under consideration] allowed a faculty member to give a letter grade. Thorpe (EN, student) opined that if the point was to prevent students from being confused about options, the more explicit the language, the better. He said that the most explicit language is the clearest language. There was more discussion about the language and whether or not the redundancy was helpful. Wood (AS) called the question and Fiedler (AS) seconded. A vote by show of hands was taken and the motion passed with none opposed.

A vote was taken on the motion to remove "or the Instructor of Record may award an "I" for the course if the student declines to receive a "W"" from the paragraph about excused absences and the motion failed with 24 in favor, 55 opposed, and five abstaining. The Chair asked if there were further comments on the original motion to approve the proposed changes to $S R$ 5.2.4.2 ("Excused Absences") and there were a few additional comments. A vote was taken and the motion passed with 63 in favor, 17 opposed, and four abstaining.

## ii. Proposed Changes to Senate Rules 6.3.1 ("Plagiarism")

Yost (EN) explained the proposed changes. The Chair said that the motion from SAASC was that the Senate approve the changes to $S R 6.3 .1$ ("Plagiarism"). Because the motion came from committee, no second was required. There were no questions or comments from senators. A vote was taken and the motion passed with 76 in favor and three opposed.

[^0]Yost (EN) explained the proposed changes. The Chair said that the motion from SAASC was that the Senate approve the changes to $S R$ 5.3.3.4 and $S R$ 5.3.4. Because the motion came from committee, no second was required. There were no questions or comments from senators. A vote was taken and the motion passed with 75 in favor and none opposed.

## iv. Proposed Changes to Admissions Requirements for BS Dietetics

v. Proposed Changes to Admissions Requirements for BS Human Nutrition

Yost (EN) explained the two remaining proposals (BS Dietetics and BS Human Nutrition), noting that they could be discussed in parallel. The Chair said that the motion from SAASC was that the Senate approve the changes to SR 4.2.2.4.A ("Human Nutrition and Dietetics Majors") for the BS Dietetics and BS Human Nutrition. Because the motion came from committee, no second was required. Yost explained that there were changes to required courses in the program that were homed in another department; those changes resulted in the need to change the premajor requirements for the BS Dietetics and BS Human Nutrition degrees. There were no questions or comments from senators. A vote was taken and the motion passed with 75 in favor and one abstaining.

Yost (EN) commented that faculty in educational units offering service courses that are taken by many students across campus have an obligation to inform the other units using those courses when changes are made that will affect the other units.
d. Senate's Rules and Elections Committee (SREC) - Connie Wood, Chair
i. Proposed Changes to Senate Rules 1.4.4.2.B ("Senate Advisory Committee on Privilege and Tenure (SACPT)")
Wood (AS), chair of the Senate's Rules and Elections Committee (SREC), explained the proposal. The Chair said that the motion from the SREC was that the Senate approve the changes to SR 1.4.4.2.B ("Senate Advisory Committee on Privilege and Tenure (SACPT)"). Because the motion came from committee, no second was required. There were no questions or comments from senators. A vote was taken and the motion passed with 70 in favor, one opposed, and one abstaining.

## 5. Safety Presentation - Chief of Police Joe Monroe

Guest Joe Monroe, UK's chief of police, gave senators a presentation on campus security issues. The presentation was well received and there were a handful of questions.

There being no further business to attend to, the meeting was adjourned at 5:23 pm.

Invited guests present: Sandra Bastin, Ruth Beattie, Richard Mitchell, Eric Monday, Joe Monroe, Rosetta Sandidge, Kathy Swan, and Mark Swanson.

Absences: Allen, Ayers, Birdwhistell, T., Birdwhistell, M., Brennen, Brown, K., Burks, Butler, Calvert, Carvalho, Cassis, Clark, Cofield, Cox, Crist, de Beer, Doyle, Hazard*, Hulse, Jong*, Jung*, Kearney, Kyrkanides, Lee, B.*, Loven, McCormick, McCulley*, Mullen, Nash, Nathu, Niespodziany, O’Connor, Profitt, Real, Richey, Shen, Smith, Stevens*, Swanson, Tick, Tracy, Vail, Vernon, Vosevich, Walz, Watt, Wilson, J., Wilson, K., Withers, and Witt.

Prepared by Sheila Brothers on Wednesday, March 9, 2016.

[^1]| From: | Schroeder, Margaret [m.mohr@uky.edu](mailto:m.mohr@uky.edu) |
| :--- | :--- |
| Sent: | Tuesday, February 16, 2016 8:26 PM |
| To: | Brothers, Sheila C; Hippisley, Andrew R; Ellis, Janie |
| Subject: | USP: English |
| Attachments: | ENG, University Scholars Program FINAL.pdf |

## Proposed New University Scholars Program: BA/BS English and MA English

This is a recommendation that the University Senate approve the establishment of a new University Scholars Program: BA/BS English and MA English in the Department of English within the College of Arts and Sciences.

The revised proposal is attached.

Best-
Margaret

Margaret J. Mohr-Schroeder, PhD | Associate Professor of STEM Education | COE Faculty Council Chair $\mid$ SAPC University Senate Committee Chair | University Senator | Secondary Mathematics Program Co-Chair | STEM PLUS Program Co-Chair | Department of STEM Education | University of Kentucky | www.margaretmohrschroeder.com


## Proposal for a University Scholars program for the Master of Arts in English

## Introduction and Rationale

The Department of English offers the degree of Master of Arts (MA) as part of our graduate program. This degree requires thirty hours and is available with a thesis or non-thesis option. Approximately four students complete the MA degree each year and almost all choose the non-thesis option. The Department also has an active Master of Fine Arts (MFA) program in Creative Writing and a Doctor of Philosophy (PhD) degree in Literature, as well as a Bachelor of Arts and Bachelor of Science in English.

The Department proposes to establish a University Scholars program for our MA program in English. This program will help to increase the number of English majors at Kentucky who choose to pursue graduate study, and strengthen the preparation of those who go on to further study in English. More specifically:

- This program will provide a formal path for our best undergraduate students to begin graduate study.
- At the same time, strong undergraduate students with the potential to excel, but who may not yet be quite ready or competitive for top graduate programs, can better prepare themselves through this program,
- There will be significant efficiencies for the students, who will be able to complete their MA degree in one year of study beyond the BA.
- Students who earn a MA degree in this program will be terrifically positioned to continue on for doctoral study, or to enter other graduate programs of study, such as Law, or to look for jobs in which an MA in English would be beneficial.


## Program Admission

A student seeking admission to the MA University Scholars program in English is required to meet the following requirements:

1. The student must be an undergraduate pursuing the BA or BS in English and must apply for the University Scholars Program in the Spring semester prior to their senior year.
2. The student must have 90 hours completed or in progress at the time $s /$ he applies and be on track to complete a Bachelor's degree in English during the first year of the University Scholars program.
3. The student must have an overall GPA of 3.2 or above on a 4.0 scale and must have a GPA of 3.5 in English (including cross-listed) courses.
4. The applicant must follow the current application procedures for the Graduate School and the Graduate Program in the Department of English and
must meet the admission standards of the Graduate School and MA program in the Department of English.
5. Admission is at the discretion of the English Department Graduate Committee.

## Program of Study

In the first year of the University Scholars Program, students may take up to twelve hours of graduate-level coursework that can be dual-counted towards the BA and MA requirements. They will also complete any outstanding BA requirements. In the second year of the program, students will complete the remaining eighteen hours for the MA degree. Participation in the University Scholars program does not change any undergraduate degree requirement or MA degree requirement.

The Director of Graduate Studies (DGS) or a faculty advlsor will advise the students in the University Scholars program regarding the graduate program. The student's undergraduate advisor will continue to provide guidance on the student's undergraduate program.

The English University Scholars Program (USP) will be assessed according to the following methods and criteria. Each year, the Department Chairperson or Director of Graduate Studies will gather the following criteria:

- Number of applicants to the program
- Number of applicants from underrepresented groups
- Selectivity within admissions
- Yield of admitted students
- GRE and undergraduate GPA of applicants and admitted students and enrolled students
- Number of students in the program
- Attrition rate between first and second year
- 2-year graduation rate
- Employment of graduates and/or admission of graduates to doctoral programs

We will evaluate the information each year in order to make adjustments to our recruiting of new students and our advising of current students as necessary. Over time, the information will also be an important point of information for any curricular adjustments we may consider in order to make our students as competitive as possible for employment or eventual doctoral study.

| YEAR 1 |  |  |  |
| :---: | :---: | :---: | :---: |
| ```FALL \ddaggerUK Core CC1 (3) qForeign language 101 (4) UK Core QFO (3) UK Core ACR (ENG 107- ENG pre-major) (3) UK Core GDY (3)``` | Total Credits: 16 | SPRING <br> UK Core CC2 (3) <br> aForeign language 102 (4) <br> UK Core HUM (ENG 230- ENG pre-major) (3) <br> UK Core SIR (3) <br> UK Core NPM (3) | Total Credits: 16 |
| YEAR 2 |  |  |  |
| FALL <br> aForeign language 201 (3) <br> UK Core CCC (3) <br> ENG 2xx Historical Survey (3) <br> A\&S NS(3) <br> UK Core SSC (3) + LAB (1) | Total credits: 16 | SPRING <br> xForeign language 202 (3) <br> ENG 2xx Historical Survey (3) <br> ENG 330: Text \& Context (GCCR) (3) <br> A\&S SS (3) <br> $\checkmark$ Elective (3) | Total Credits: 15 |
| YEAR 3 |  |  |  |
| FALL <br> ${ }^{\circ}$ ENG course 300-500 level (Early Period) (3) <br> ${ }^{\circ}$ ENG course at 300-500 level (3) <br> * ENG course at 300-500 level (3) <br> * ENG course at 300-500 level (3) <br> *A\&S NS (3) | Total Credits: 15 | SPRING <br> *ENG course at 300-500 level (3) <br> *ENG course above 400-level (3) <br> *ENG course above 400-level (3) <br> *A\&S SS (3) <br> * Elective (3) <br> Apply to USP Program | Total Credits: 15 |
| YEAR 4 |  |  |  |
| FALL <br> ${ }^{\circ}$ MA ENG course at 600-700 level (3) <br> * MA ENG course at 600-700 level (3) <br> *300+ course in allied discipline (3) <br> *300+ course (3) <br> $\diamond$ Elective (3) | Total Credits: 15 | SPRING <br> ${ }^{\circ}$ MA ENG course at 600-700 level (3) <br> ${ }^{\circ}$ MA ENG course at 600-700 level (3) <br> $\checkmark 300+$ course in allied discipline (3) <br> $\checkmark 300+$ course in allied discipline (3) | Total Credits: 12 |
| YEAR 5 |  |  |  |
| FALL <br> ENG 600+ (3) <br> ENG 600+ (3) <br> ENG 600+ (3) | Total Credits: 9 | SPRING <br> ${ }^{\circ}$ ENG 600+ (3) <br> * ENG 600+ (3) <br> *ENG 600+ (3) | Total Credits: 9 |

$\ddagger \quad$ Incoming students are strongly encouraged to take WRD 112 to fulfill the CC1 and CC2 requirements if they have any of the following: an ACT English score of 32 or Higher, an SAT Verbal score of 720 or Higher, or an AP English Composition score of 4 or 5 . If the Student has been accepted into the University Honors Program, the Student is required to take WRD 112 to fulfill CC1 and CC2.

* To be discussed with your academic advisor.
p Students who have taken at least 2 years of a language in high school can complete the A\&S Foreign Language Requirement with 3 college semesters of a different language. Also note that if you take a foreign language placement exam, you may be exempt from 1 or more of the beginning semesters of that language. Any language sequence may be used to satisfy the foreign language requirements French, German, Greek, or Latin is recommended.
* 6 hours of 'free' electives - that do not count toward any other requirement - must be taken. Additional electives may be required to earn the required minimum of 120 hours.
- Major Elective credit at the 200 level is restricted to: two additional ENG Historical Surveys that are not counted toward the Historical Survey requirement; plus two of the following: ENG 207, ENG/LIN 221, ENG 260, ENG 280, and ENG 290. Otherwise English electives
must be at the 300-500 level. Two electives must be at the 400-level, and one must be above 407 .



## Brothers, Sheila C

| From: | Nikou, Roshan |
| :--- | :--- |
| Sent: | Friday, December 11, 2015 10:41 AM |
| To: | Brothers, Sheila C; Carvalho, Susan E; Ellis, Janie; Ett, Joanie M; Hippisley, Andrew R; |
|  | Jackson, Brian A; Lindsay, Jim D.; Nikou, Roshan; ; rice, Cleo; Timoney, David M |
| Cc: | Molloy, Janelle; Parker, Steve; Perkins, Andrea L; Harmon, Camille; Clymer, Jeffory A; |
|  | McCuddy, Jacqueline R; Ivanov, Bobi |
| Subject: | Transmittal |
| Attachments: | Masters in KHP Sport Leadership w sig-signed.pdf; Ph.D.Radiation Sciences-signed.pdf; |
|  | ENG, University Scholars Program, 10_20, 2015-signed.pdf; Masters Program CHANGE |
|  | Form 2015-HB-MPH.pdf; MHA Program Change 2015 Form.pdf; HA-CPH Course |
|  | Change Table_TOGC-signed.pdf |

## TO: Andrew Hippisley, Chair and Sheila Brothers, Coordinator Senate Council

FROM: Susan Carvalho, Chair and Roshan Nikou, Coordinator Graduate Council

The Graduate Council approved the following proposals and is now forwarding them to the Senate
Council to approve. All the courses listed below, are accessible via E-Cats' workflow.

## Programs

Ph.D. in Radiation Science
University Scholars English
Master of Public Health
Master of Health Administration
Master in KHP

## Courses

PA 695 Data and Revenue Forecasting
PA 696 Legal Issues in Public Financial Management
PA 697 Special Topics in Public Financial Management
BAE 535 Environmental Control System Design and Reclamation
CHE 516 Inorganic Materials Chemistry
CPH 716 Proseminar in Occupational Health and Safety
CPH 746 Research Methods and Program Evaluation
LIN 615 Advanced Phonology
LIN 622 Advanced Syntax
LIN 640 Advanced Laboratory in Linguistics
LIN 709 Advanced Seminar in Semantics and Pragmatics

College of Arts \& Sciences Educational Policy Committee 202 Patterson Office Tower Lexington, KY 40506-0027

859 257-6689
fax $859257-2635$
mww.as.uky.edu/education-policycommittee

10/20/15

## Dear Graduate Council,

The College of Arts and Sciences Education Policy Committee unanimously approved the English University Scholars proposal on Tuesday, October 6, 2015.

Sincerely,


Stephen Testa
Chair, Education Policy Committee

Harmon, Camille

| From: | Clymer, Jeffory A |
| :--- | :--- |
| Sent: | Wednesday, September 02, 2015 3:58 PM |
| To: | Harmon, Camille |
| Cc: | Pickett, Kristen B |
| Subject: | English University Scholars Program |
| Attachments: | ATT21020,docx; English University Scholars Proposal,docx |
|  |  |
| Follow Up Flag: | Follow up |
| Flag Status: | Flagged |

Dear Camille,
The English Department voted today to establish a Unlversity Scholars Program (5-year comblned BA/MA) within the English department, The vote was $23-0$, wilt 1 abstention. I'm attaching the proposal that we voted to accept, as wall as a curricular map for the degree. Would you please start the proposal through the approval process? Thanks, and let me know If you need anything else from me at this point.
Best,
Jeff

Jeffory A. Clymer .
Professor and Chairperson
Department of English
University of Kenfucky
859.257.2901
http://english,as.uky.edu/users/iaclym3
http://english,as.uky,edu/

## Brothers, Sheila C

| From: | Schroeder, Margaret [m.mohr@uky.edu](mailto:m.mohr@uky.edu) |
| :--- | :--- |
| Sent: | Wednesday, February 17, 2016 10:04 AM |
| To: | Brothers, Sheila C; Hippisley, Andrew R; Ellis, Janie |
| Subject: | Master of Public Financial Management |
| Attachments: | MPFM Proposal - FINAL.pdf |
|  |  |
| Follow Up Flag: | Follow up |
| Due By: | Thursday, February 18, 2016 10:00 AM |
| Flag Status: | Flagged |

This is a recommendation that the University Senate approve, for submission to the Board of Trustees, the establishment of a new MA degree: Public Financial Management, in the Martin School of Public Policy and Administration within the Graduate School.

Please find the revised proposal attached.

Best-

Margaret

Margaret J. Mohr-Schroeder, PhD | Associate Professor of STEM Education | COE Faculty Council Chair | SAPC University Senate Committee Chair | University Senator | Secondary Mathematics Program Co-Chair | STEM PLUS Program Co-Chair | Department of STEM Education | University of Kentucky | www.margaretmohrschroeder.com


# NEW MASTERS DEGREE PROGRAM FORM <br> (Attach completed "Application to Classify Proposed Program"1) 

GENERAL INFORMATION


## CHANGE(S) IN PROGRAM REQUIREMENTS

| 1. | Number of transfer credits allowed | 9 |
| :--- | :--- | :--- |
|  | (Maximum is Graduate School limit of 9 hours or $25 \%$ of course work) |  |
| 2. | Residence requirement (if applicable) | NO |
| 3. | Language(s) and/or skill(s) required | NO |
| 4. | Termination criteria | YES |
| 5. | Plan A Degree Plan requirements ${ }^{3}$ (thesis) | NO |
| 6. | Plan B Degree Plan requirements ${ }^{3}$ (non-thesis) | YES |
| 7. | Distribution of course levels required | 600 |
|  | (At least one-half must be at $600+$ level \& two-thirds must be in organized courses.) |  |

8. Required courses (if applicable) 12
9. Required distribution of courses within program (if applicable)

## 12

10. Final examination requirements
11. Explain whether the proposed new program (as described in numbers 1 through 10) involve courses offered by another department/program. Routing Signature Log must include approval by faculty of additional department(s).
YES

[^2]12. What is the rationale for the proposed new program?

There are few public administration schools in the country providing nationally recognized concentrations in public financial management (the Martin School at the University of Kentucky, the Maxwell School at Syracuse, the University Indiana or to a lesser degree the University of Georgia or the University of Nebraska at Omaha) and few schools provide graduate programs specifically focused on training financial managers for mid-level or senior positions in public and non-profit organizations. The need for enhanced training and professional financial management degree programs has been recognized by national association's including the Association of Governmental Accountants and the Government Financial Officer's Association.

The 36-hour online Master of Public Financial Management (MPFM) will offer rigorous academic and practical training for traditional students seeking an advanced degree as well as those currently working within the area of governmental finance and accounting and non-profit organizations. The MPFM builds upon strong foundations in finance and accounting including advanced topics in areas specific to public financial management including government accounting, auditing, securities, pensions/insurance, forecasting and other subjects.

## NEW MASTERS DEGREE PROGRAM FORM

Signature Routing Log

## General Information:

Program Name: Master of Public Financial Management
Proposal Contact Person Name: Merl Hackbart $\quad \underline{1627}$ 859-257- Email: $\underline{\text { m.hackbart@uky.edu }}$

INSTRUCTIONS:
Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:

| Reviewing Group | Date Approved | Contact Person (name/phone/email) | Signature |
| :---: | :---: | :---: | :---: |
| Martin School Faculty | May $12^{\text {th }}, 2015$ | Merl Hackbart / 859-257-1625 / m.hackbart@uky.edu |  |
| Graduate Council | $\text { Sergi 3, } 2015$ | BLIANA.JACKTOL / $7.7126$ |  |
| Faculty Senate Council |  | / / | $\bigcirc$ |
| University Senate |  | $1 /$ |  |
|  |  | $1 /$ |  |

## External-to-College Approvals:

| Council | Date Approved | Signature | Approval of Revision ${ }^{4}$ |
| :---: | :---: | :---: | :---: |
| Undergraduate Council | NA |  |  |
| Graduate Council | $913115$ | Rosthan maer |  |
| Health Care Colleges Council | NA |  |  |
| Senate Council Approval |  | University Senate Approval |  |

## Comments:

[^3]
## PROPOSAL

Master of Public Financial Management Program

## Submitted by James P. Martin School of Public Policy and Administration

A. Abstract

- Master of Public Financial Management
B. Program Description

Master of Public Financial Management

- Faculty of Record
- Program Director
- Admission
- Termination
- Time and Flexibility
- Affordability
- Faculty
- Administration and Support
- Format
- Curriculum

0 Class Matrix
0 Course Descriptions
C. Resource Need and Availability
D. Program Justification and Outcomes

1. Program Need
2. Accountability
3. Recruitment
4. Reporting and Benchmarking
5. Student Learning Outcomes (SLOs)
6. Impact on Kentuckians
7. Impact on Kentucky Communities and Kentucky Economy
E. Implementation Plans

## PROPOSAL

## Master of Public Financial Management Program

Submitted by<br>James P. Martin School of Public Policy and Administration

## A. ABSTRACT

The Master of Public Financial Management is designed to meet the current and expanding national demand for well-trained financial managers for public and non-profit organizations. The Martin School, because of its historical focus on public finance and financial management and national reputation resulting from its $2^{\text {nd }}$ place national ranking in this area by U.S. News and World Report, is particularly suited to initiate a new program to train students with this focus in cooperation with the Von Allmen School of Accountancy

Governments at all levels as well as non-profit organizations are facing multiple challenges as they attempt to efficiently and effectively manage their finances and initiate new programs that are financially sustainable. Their efforts are made more difficult by their inability to find and attract well-trained financial management graduates who are interested in pursuing careers as financial managers or by their ability to find seasoned professionals prepared to accept the responsibilities associated with senior finance positions in their organizations. The public administration schools and departments have been slow to provide the targeted training and skill sets needed by mid-career professionals or by new graduates desiring a career in public financial management.

The Martin School has perceived an unmet need for rigorous public financial management, and analytic methodology to answer and analyze complex financial issues in the public sector. It seeks to help meet this need by providing a Master of Public Financial Management (MPFM) degree program. The MPFM program will differ from the interdisciplinary Master of Public Administration (MPA) and the Master of Public Policy (MPP) degrees in several respects:

1) The MPFM program will prepare students for advanced-careers in public financial management and analysis. The MPP program prepares students for a policy analyst or research career; the MPA prepares students for public management and administration positions.
2) The MPFM will offer advanced topics in public accounting, audit, municipal securities, public pensions/insurance, and other special topics in public finance, topics not included in the MPA or MPP programs.
3) The MPFM program will be offered completely online, allowing for non-traditional students and the flexibility of online coursework.

Master of Public Financial Management: By offering the Master of Public Financial Management (MPFM), the Martin School is seeking to fill a niche that is not being addressed currently with other traditional and online graduate programs. By combining the academic strengths and reputation of the Martin School faculty in public budgeting and public finance along with faculty from the Von Allmen School of Accountancy in governmental accounting and audit, the MPFM will set itself apart from other programs. Furthermore, the online format offers a convenient and ever-popular means of achieving the degree. ${ }^{1}$

There are few public administration schools in the country providing nationally recognized concentrations in public financial management (the Martin School at the University of Kentucky, the Maxwell School at Syracuse, the University Indiana or to a lesser degree the University of Georgia or the University of Nebraska at Omaha) and few schools provide graduate programs specifically focused on training financial managers for mid-level or senior positions in public and non-profit organizations. The need for enhanced training and professional financial management degree programs has been recognized by national association’s including the Association of Governmental Accountants and the Government Financial Officer's Association.

## B. PROGRAM DESCRIPTION: Master of Public Financial Management

The 36-hour online Master of Public Financial Management (MPFM) will offer rigorous academic and practical training for traditional students seeking an advanced degree as well as those currently working within the area of governmental finance and accounting and non-profit organizations. The MPFM builds upon strong foundations in finance and accounting including advanced topics in areas specific to public financial management including government accounting, auditing, securities, pensions/insurance, forecasting and other subjects.

Faculty of Record: Faculty of Record: The following page lists three senior faculty members who have agreed to serve as faculty of record for the proposed Graduate Certificate in Public Financial Management. Beyond those listed, future faculty will be selected one of two ways: from the graduate faculty of the supporting departments (Martin School of Public Policy and Administration and the Von Allmen School of Accountancy) or through a hiring process which will screen applicants for appropriate credentials. If visiting or other faculty are selected to serve as course instructors, the Martin School will approve only those instructors with appropriate credentials to qualify as temporary appointments to the UK Graduate Faculty and/or to meet AQ status as reported to our accrediting body NASPAA and SACS. If a faculty of record was to become ineligible for any reason, the position could be filled temporarily or permanently by the graduate faculty of the departments or selected through the aforementioned process.

[^4]
## - Dr. Merl Hackbart, Interim Director

 Martin School of Public Policy and Administration University of Kentucky859-257-1627, m.hackbart@uky.edu

I, MERL HACKBANR plan to serve as a faculty member and instructor as part of the new online Master's in Public Financial Management degree program. As an instructor, I have offered my support for the program and will be teaching courses in my area of expertise-public financial management.


- Dr. Dwight Denison, Professor of Public \& Nonprofit Finance Martin School of Public Policy and Administration University of Kentucky 859-257-5742, dwight.denison@uky.edu

I, Dwitur Denian, plan to serve as a faculty member and instructor as part of the new online Master's in Public Financial Management degree program. As an instructor, I have offered my support for the program and will be teaching courses in my area of expertise -public financial management.


- Dr. Eugenia Toma, Wendell H. Ford Professor of Public Policy Martin School of Public Policy and Administration
University of Kentucky
859-257-1156, eugenia.toma@uky.edu
I, Eugenia Tome, plan to serve as a faculty member and instructor as part of the new online Master's in Public Financial Management degree program. As an instructor, I have offered my support for the program and will be teaching courses in my area of expertise-public financial management.


Program Director: The Program Director position is currently being reviewed by University of Kentucky Human Resources. Plans include hiring someone as the director; however, without the position created, it is not possible at this time to name a director. Until then, Dr. Merl Hackbart is considered the Director of the Master’s in Public Financial Management degree program.

Admission: The Martin School is a nationally-ranked, competitive program. The Admissions Committee reviews each file in an applicant's dossier in order to admit academically strong applicants that show the greatest potential for completing the program and succeeding in a career. Academic qualifications are accessed based on grade point average, undergraduate major, institutions, GRE scores and academic references.

The online Master in Public Financial Management will maintain high standards of admission to assure UK's admission and recruitment policies and decisions for distance learning are equivalent to UK's admission and recruitment standards for traditional degree programs. Students entering the Master in Public Financial Management Program are expected to have at least a 3.0 grade point average (on a 4.0 scale), a cumulative score of $50 \%$ or more on the quantitative and verbal sections of the GRE or a minimum score of $50 \%$ on the GMAT, and letters of recommendation that provide convincing evidence about the applicant's ability and potential.

Termination: The Master of Public Financial Management Program Termination student performance policies mimic those of the nationally ranked Master of Public Administration Program and will state that a student may be dismissed from the program for any one of the following reasons:

1. Receiving a grade of " C " for any 9 credit hours or three classes.
2. Receiving a grade of "E" for any 3 credit hours.
3. Twice failing the Final Examination.

Students facing termination will be notified and will have an opportunity to discuss the pending action with the Director of Graduate Studies. Appeals are processed through the Student Affairs Committee. Graduate degrees must normally be completed within eight years of the beginning of graduate study. Extensions require a request on the part of the director of graduate studies and approval by the Dean of the Graduate School.

Time and Flexibility: For working professionals and non-traditional students, an online program provides the flexibility needed to balance work, school, and other obligations. For traditional students, an online program provides an opportunity to seek a Master Degree from a university that may not be available to them by traditional routes. Via the University's Department of Distance Learning and the Martin School of Public Policy and Administration, students complete assignments and engage with their faculty without the conventional restrictions of a traditional on-campus environment.

Affordability: Students accepted into the online Master of Public Financial Management program pay in-state tuition rates, as required by the University. The online Master program offers in-state and out-of-state students an affordable option for graduate studies. Students are encouraged to pursue any number of financial aid options available to students who meet University requirements.

Faculty: Courses will be taught by faculty with expertise in the areas of public budgeting, debt/cash management, governmental accounting/audit and other topics relevant to public financial management. All faculty and instructors will have backgrounds and expertise in relevant areas of instruction, with some being located at other leading Universities across the country, adding to the diversity of instruction and network opportunities for students.

Administration and Support: Students who attend online classes will receive the same quality instruction as those attending traditional classes. The Martin School of Public Policy and Administration ensures the Master of Public Financial Management online courses will be provided in an up-to-date format with courses lead by top-notch, nationally recognized faculty. Further, comparability of online distance learning programs to campus-based programs and courses is required by University policy to be evaluated based on student learning outcomes (SLO), retention and student satisfaction.

The Master of Public Financial Management program will have a dedicated program Director to oversee daily operations of the program, including program marketing, admissions, curriculum, student support and other administrative duties. In addition, student support and services will be provided by the University's Distance Learning Programs. Online instructional support will be provided to faculty by the University's Department of E-Learning. http://www.uky.edu/elearning.

Format: Students seeking the flexibility of online instruction will experience a combination of self-study and student-faculty interaction over an online learning network. Students will complete weekly assignments, readings, exams and other activities with the same level of rigor and expectations of other traditional Master programs offered by the Martin School of Public Policy and Administration. Students will receive registration and course information by way of the University Distance Learning Program. http://www.uky.edu/DistanceLearning and the Martin School. The Martin School website will provide a dedicated portal for students to access and enroll in courses and other program support.

Curriculum: Classes are offered as 8-week and 4-week sessions during the regular University Fall/Spring/Summer Sessions. The MPFM program consists 36 - hours of credit with 12 Core Classes including a Capstone Course. Two 8-week courses will be offered sequentially in the

Fall/Spring Semesters. Courses will also be offered during the 4 -week and 8-week Summer Session. By taking one course as it is offered, the MPFM may be completed in 2 years.

## Class Matrix

| Fall 8 Week Session 1 | Fall 8 Week Session 2 | Spring 8 Week Session 1 | Spring 8 <br> Week <br> Session 2 | $\begin{aligned} & \text { Summer } 1 \\ & 4 \text { Week } \end{aligned}$ | Summer 2 8 Week |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PA 631 <br> Public <br> Financial <br> Management: <br>  <br> Debt <br> Management <br> Core <br> 3 Hours | PA 632 <br> Public Funds <br> Management <br> Core <br> 3 Hours | PA 625 <br> Governmental <br> Accounting and <br> Financial <br> Condition <br> Analysis <br> Core <br> 3 Hours | PA 626 <br> Applications in <br> Government <br> Accounting and Audit <br> Core <br> 3 Hours | PA 694 <br> Public <br> Pensions and <br> Insurance <br> Core <br> 3 Hours | PA 695 <br> Data and <br> Revenue <br> Forecasting <br> Core <br> 3 Hours |
| PA 683 Tax Policy <br> Core <br> 3 Hours | PA 627 <br> Governmental Auditing <br> Core <br> 3 Hours | PA 633 <br> Municipal <br> Securities <br> Core <br> 3 Hours | PA 696 Legal Issues in Public <br> Financial <br> Management <br> Core <br> 3 Hours | PA 697 <br> Special <br> Topics: Public <br> Financial <br> Management <br> Core <br> 3 Hours | PA 681 <br> Capstone <br> Core <br> 3 Hours |
| RED = New Courses BLUE = Existing Courses |  |  |  |  |  |

Course Descriptions: The following section contains course descriptions for the twelve (12) courses making up the Master of Public Financial Management Program. The new program consists of 5 existing courses and 7 new courses. Syllabi for all courses are included as an Appendix to this Proposal.

PA 631 Public Financial Management: Budgeting/Debt Management (existing course)
An analysis of budget structure and process, revenue structure, administration, public capital acquisition and debt management. This course emphasizes an applied focus and comparative analysis of alternative budget, revenue, and debt management structures and strategies. (Core)

PA 632 Investments/Cash Management (existing course)
A study of the management of public funds including the accumulation and investment of such funds and the accounting for those transactions. It will also include topics such cash forecasting, cash management practices and public funds investment strategies. (Core)

## PA 625 Governmental Accounting and Financial Condition Analysis (new course)

The course will examine the characteristics of governmental and nonprofit accounting emphasizing the various fund types and account groups, review and evaluation of presently recommended accounting and financial reporting procedures (GAAP, and an exploration of practical governmental and nonprofit accounting practices and methods. (Core)

## PA 626 Applications in Governmental Accounting and Audit (new course)

Gain hands-on experience with case studies designed to simulate real-world scenarios and common problems in today's public sector. This course goes beyond the theory and will demonstrate how to navigate the key issues that arise in governmental and not-for-profit accounting and auditing. (Core)

## PA 627 Governmental Auditing (new course)

This course focuses on components of the governmental audit process unique to the public sector. Students will gain an understanding of the Government Auditing Standards (GAGAS), types of audits, the role of audit objectives and audit evidence, the fundamentals of interviewing, the preparation of audit working papers, as well as how to interpret audit findings and elements based on qualitative and quantitative evidence and communicate those findings to non-financial audiences. (CORE)

## PA 683 Tax Policy (existing course)

This course will explore various tax policy issues including how and why different levels of government implement and design different types of taxes, concepts of distributive justice, progressivity, tax compliance and enforcement, consumption and income taxes, and tax incentives. (CORE)

## PA 633 Municipal Securities (existing course)

An analysis of the theoretical and operational issues associated with the municipal securities industry. Among the issues considered are the factors influencing public debt issuance including infrastructure needs, public authorities, debt capacity, bond ratings and optional debt issuing instruments. Municipal security demand issues are also assessed including market segmentation and fixed income portfolio management issues among others. Technical financial and regulatory issues are also considered.

PA 694 Public Pensions and Insurance (new course)

Martin School of Public Policy and Administration - Master of Public Financial Management Proposal

This course covers basic actuarial principles as they apply to public pensions and insurance. Topics will include the purpose of these systems, the role of the actuary in development of risk classification and pricing assumptions, how actuarial data affect decision making, calculation of product cash flows, reserve methods, and re-insurance. (CORE)

## PA 695 Data and Revenue Forecasting in the Public Sector (new course)

This course is covers approaches to forecasting including time series methods, how forecasts are used for policy decision-making, and political influences on forecasting. Students will learn how to interpret and evaluate forecasts with a focus on how to effectively utilize the information generated. (CORE)

## PA 696 Legal Issues in Public Financial Management (new course)

This course focuses on the public financial manager's legal responsibilities with respect to underwriters, borrowers, bondholders, trustees, and other parties in connection with the issuance and holding of tax-exempt bond. Other topics include legal issues related to utility franchises, public/private contracts, governmental mandates, financial cyber security, and taxing authority.

## PA 697 Special Topics in Public Financial Management (new course)

This course will focus on timely issues related to public financial management. Course content and subject matter may vary from year to year.

## PA 681 Capstone (existing course)

The Capstone provides students with an opportunity to integrate learning from various courses in analysis of real-world issues. The capstone project consists of a project design, action plan, and implementation. Students, under guidance of a faculty member, carry out data collection and analysis, evaluate their findings, and provide conclusions and recommendations.

## C. RESOURCE NEEDS AND AVAILABILITY

The Master in Public Financial Management will be delivered online and will be the first online program for the Martin School and its collaborating partner, the Von Allmen School of Accountancy. As a new program, the financial plan involves several steps and includes costs in three general categories:

- Program development costs associated with the design of seven new online courses and redesign/conversion of 5 courses to online format.
- Program operational costs associated with administration, program management, marketing and technical assistance;
- Faculty and staff/graduate assistant compensation costs associated with the online program.

The online 36-hour Master of Public Financial Management will begin in with a target of 20 students. The Program stabilizes in Year 3 with 40 Master students.

Revenue from the Graduate Certificate Program (proposed for approval separately) is expected to support activities related to operation of the Graduate Certificate Program as well as generate revenue to assist with the development and implementation of the 36-hour Master of Public Financial Management Program and thus is considered a critical element in the financial details of the Master of Public Financial Management Program. Because the new program is implemented in phases, the proposed budget for the Master of Public Financial Management and Graduate Certificate Program are interrelated including projected revenue and program startup/operational costs for Year 1, 2 and 3.

To clarify further, the Master of Public Financial Management Program and the Graduate Certificate Program are "interconnected" in that a student may take 4 courses to complete the Certificate Program and receive the Certificate without completing the master's degree. For that reason, the following budget includes revenues and expenses that are associated with both activities.

Budgeted revenues include 1) Graduate Certificate Tuition, 2) Distance Learning Fees as defined by the University and 3) Master Student Tuition. The Martin School will also submit a request for $\$ 197,502$ to the 2015 E-Learning Innovation Initiative (eLII) to assist with program development start-up costs (e.g., technical course development, instructional design, faculty skill development, marketing, and project management). This revenue is included in Year 1 only. See budget summary for details.

In addition, the University E-Learning program provides $\$ 3,000$ stipends directly to faculty per new course via the E-Learning + Innovation Design Lab (Faculty Skill Development) RFA to assist with course design, online teaching strategies, faculty training, and development. This last category is considered indirect revenue and not included directly in the proposed budget but will generate up to $\$ 36,000$ in stipends for the faculty.

The following Budget outlines revenues and expenses for Year 1-3. Items in Year 1 highlighted in GREEN include program startup costs associated with the first year's program marketing, administration, faculty course development summer salary and other technical support involved in an online program. These expenses, totaling $\$ 197,502$ are included in the Martin School's 2015 E-Learning Innovation Initiative (eLII) grant application. In Year 2, the remaining 6 online courses will be developed. Course development expenses are included as "Faculty Course Development" and are based on a median faculty salary of \$130,000 and 0.11 FTE summer rate plus benefits at $22 \%$.

Public Financial Management Program

| YEAR 1 Certificate Program Begins |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| REVENUE | Students | Unit |  | NOTES |
| Certificate Tuition Fee ${ }^{1}$ | 25 | \$596/credit | \$178,800 |  |
| Distance Learning Fee ${ }^{2}$ | 25 | \$360 | \$9,000 |  |
| E-Learning Innovation Initiative Grant |  |  | \$197,502 | One-time allocation for startup |
| TOTAL DIRECT REVENUE |  |  | \$385,302 |  |
| EXPENSES |  |  |  |  |
| Program Director* |  |  | \$40,000 |  |
| Program Director Benefits* |  |  | \$8,800 | Based on 22\% |
| Teaching Assistant |  | 1 | \$26,200 | Includes Waived Tuition |
| Marketing/Travel* |  |  | \$20,000 |  |
| Faculty Course Development* |  | \$18,117/class | \$108,702 | 6 classes - based on 0.11 summer median salary \$130,000 + benefits |
| Admin Tech Support* |  |  | \$20,000 | 0.50 FTE |
| Instruction (CERTIFICATE) |  | \$12,500/class | \$50,000 | 4 Courses <br> Average/Course = <br> \$12,500 |
| Misc Expenses |  |  | \$10,000 |  |
| TOTAL EXPENSES |  |  | \$283,702 |  |
| NET REV/EXP |  |  | \$101,600 | 36\% |


| REVENUE | Students | Unit |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Certificate Tuition Fee ${ }^{1}$ | 50 | \$596/credit | \$357,600 |  |
| Distance Learning Fee ${ }^{2}$ | 50 | \$360 | \$18,000 |  |
| Master Students Tuition ${ }^{3,4}$ | 20 | \$10,768 | \$215,360 |  |
| TOTAL DIRECT REVENUE |  |  | \$590,960 |  |
| EXPENSES |  |  |  |  |
| Program Director ${ }^{5}$ |  |  | \$80,000 |  |
| Benefits |  |  | \$17,600 | Based on 22\% |
| Teaching Assistant |  | 3 | \$78,600 | Includes Waived Tuition |
| Marketing/Travel |  |  | \$15,000 |  |
| Faculty Course Development |  | \$18,117/class | \$108,702 |  |
| Admin Tech Support |  |  | \$20,000 | 0.50 FTE |
| Instruction (CERTIFICATE-2 sections) |  | \$12,500 | \$100,000 | 8 Courses <br> Average/Course = $\$ 12,500$ |
| Instruction (Master Program) |  | \$12,500 | \$50,000 | 4 Courses Average |

$\left.\begin{array}{|lll|} & & \text { /Course }=\$ 12,500 \\ \text { Assumes Program } \\ \text { Director will be teaching } \\ \text { 2 courses. }\end{array}\right\}$

| REVENUE | \#Students | Unit |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Certificate Tuition Fee ${ }^{1}$ | 50 | \$596/credit | \$357,600 |  |
| Distance Learning Fee ${ }^{2}$ | 50 | \$360 | \$18,000 |  |
| Master Students Tuition ${ }^{3,4}$ | 40 | \$10,768 | \$430,720 | target of 20/year |
| TOTAL REVENUE |  |  | \$806,320 |  |
| EXPENSES |  |  |  |  |
| Program Director ${ }^{5}$ |  |  | \$80,000 |  |
| Benefits |  |  | \$17,800 | Based on 22\% |
| Teaching Assistant |  | 4 | \$104,800 | Includes Waived Tuition |
| Marketing/Travel |  |  | \$15,000 |  |
| Admin Support |  |  | \$20,000 | 0.50 FTE |
| Instruction (CERTIFICATE) |  | \$12,500 | \$100,000 | 2 Sections of Certificate <br> 10 Courses <br> Average/Course = |
| Instruction (Master Program) |  | \$12,500 | \$125,000 | \$12,500 <br> Assumes Program Director will be teaching two courses. |
| Misc Expenses |  |  | \$10,000 |  |
| TOTAL EXPENSES |  |  | \$472,600 |  |
| NET REV/EXP |  |  | \$333,720 | 71\% |

${ }^{1}$ Online Certificate Tuition based on in-state tuition \$596/credit hour
${ }^{2}$ As required by Distance Learning Programs
\$10/credit
${ }^{3}$ In-state tuition required for all online programs.
${ }^{3}$ Based on 2015-16 in-state tuition rate of $\$ 5,384 /$ semester
${ }^{4}$ Program Director will teach 2 courses annually starting in Year 2

## D. PROGRAM JUSTIFICATION AND OUTCOMES

## 1. Meeting a Need

The Master of Public Financial Management (MPFM) is designed to meet the needs of several specific groups of potential students. The major potential student group includes in-
service professionals who are in finance, budgeting, accounting or audit positions who desire to enhance their understanding of emerging financial management strategies and policies to enhance their opportunities for career advancement. Another potential student group includes recent graduates who desire to enter the field of public financial management and are seeking rigorous graduate degrees which will prepare and jump start their career opportunities.

In addition to these potential student groups, the MPFM will be attractive to professionals in consulting firms, accounting firms that specialize in governmental and non-profit accounting as well as staff in other private firms that focus on public financial management issues such as rating agencies and municipal security underwriting firms.

The Martin School will be the one of only a few institutions in the county and the only institution in Kentucky to offer a Master of Public Financial Management degree. Although the Master of Public Administration (MPA) has some similarities, the MPFM allows students to gain more rigorous training in public financial management than would be possible under the broad MPA program. Other Kentucky institutions that offer the MPA degree include Western Kentucky University, Northern Kentucky University, the University of Louisville, and Eastern Kentucky University. All of these programs have broad curriculums addressing management as well as public policy. None of these programs require courses such as public sector accounting, auditing, tax policy, municipal securities, public pensions/insurance, forecasting, etc. that serve as core classes within the proposed MPFM program.

## 2. Accountability

The Master of Public Financial Management is designed to meet the current and expanding national demand for well-trained financial managers for public and non-profit organizations. The Martin School, because of its historical focus on public finance and financial management and national reputation resulting from its $2^{\text {nd }}$ place national ranking in this area by U.S. News and World Report, is particularly suited to initiate a new program to train students with this focus in cooperation with the Von Allmen School of Accountancy

Governments at all levels as well as non-profit organizations are facing multiple challenges as they attempt to efficiently and effectively manage their finances and initiate new programs that are financially sustainable. Their efforts are made more difficult by their inability to find and attract well-trained financial management graduates who are interested in pursuing careers as financial managers or by their ability to find seasoned professionals prepared to accept the responsibilities associated with senior finance positions in their organizations. The public administration schools and departments have been slow to provide the targeted training and skill sets needed by mid-career professionals or by new graduates desiring a career in public financial management.

The Martin School has perceived an unmet need for rigorous public financial management, and analytic methodology to answer and analyze complex financial issues in the public sector. It seeks to help meet this need by providing a Master of Public Financial Management (MPFM) degree
program. The MPFM program will differ from the interdisciplinary Master of Public Administration (MPA) and the Master of Public Policy (MPP) degrees in several respects:

1) The MPFM program will prepare students for advanced-careers in public financial management and analysis. The MPP program prepares students for a policy analyst or research career; the MPA prepares students for public management and administration positions.
2) The MPFM will offer advanced topics in public accounting, audit, municipal securities, public pensions/insurance, and other special topics in public finance, topics not included in the MPA or MPP programs.

Courses will be taught by faculty with expertise in the areas of public budgeting, debt/cash management, governmental accounting/audit and other topics relevant to public financial management. All faculty and instructors will have backgrounds and expertise in relevant areas of instruction, with some being located at other leading Universities across the country, adding to the diversity of instruction and network opportunities for students.

## 3. Recruitment

Martin School faculty and staff currently recruit students using a variety of methods. Faculty and staff visit public and private undergraduate institutions within Kentucky to meet with students and provide them with brochures about the Martin School and its programs. They also contact prospective students by telephone to answer questions. The Martin School also works to recruit students from institutions across the nation. Efforts are primarily focused on sending information about master's and doctoral programs to faculty advisors in political science, economics, and policy programs. Faculty members also indirectly recruit students through their collegial relationships with faculty at other institutions.

The recruitment of non-traditional students is facilitated through the Martin School's regular interactions with public agencies, and nonprofit organizations. The Martin School will interact directly with professional associations such as the Government Finance Officers Association, Association of Governmental Accountants, the National League of Cities, Kentucky Education Association, school districts, and other groups to recruit potential students.

The Martin School also fundamentally values the recruitment of minority students. It shares the University's commitment to offering more minorities with access to graduate education. The first step in providing access is to make sure undergraduate students are made aware of opportunities in public administration. To this end, faculty, staff, and students attend such events as the University of Louisville's Minority Recruitment Day to have personal interactions with students. The second step is to insure that minority students apply for targeted

Fellowships and scholarships. All minority students who request information packets are provided with information about special opportunities funding through the graduate school, including the Commonwealth Incentive Award, a non-competitive source of tuition funds for full- and part-time students.

## 4. Reporting and Benchmarking

There will be two different kinds of periodic assessment: (1) programmatic assessment and (2) student assessment. For (2) we will use the standard assessment exercise adopted for our existing Masters programs: student learning outcomes measured against specified rubrics . For (1) the Martin School will use student evaluations for individual courses, and schedule periodic program reviews. We will also monitor graduation rates and graduate destinations.

There will be two different kinds of periodic assessment: (1) programmatic assessment and (2) student assessment. For (2) we will use the standard assessment exercise adopted for our existing Masters programs: student learning outcomes measured against specified rubrics. For (1) we will use student evaluations for individual courses, and schedule periodic program reviews. We will also monitor graduation rates and graduate destinations.

## 5. Student Learning Outcomes (SLOs)

The intended student core learning outcomes of the MPFM:
$\checkmark$ Understand the process, structures, and underlying logic of financial administration in the public sector including budgeting and debt management including securities, working with bond counsel, etc.
$\checkmark$ Have knowledge of basic principles in that relate to public budgeting and the budgetary process.
$\checkmark$ Identify differences in revenue processes, revenue sources, revenue forecasting, and budgetary challenges that exist between different levels of government.
$\checkmark$ Identify and understand the politics associated with public budgeting at each stage in the process, among participants, and at various levels of government.
$\checkmark$ Understand stabilization policy, financing the budget and budget deficits
$\checkmark$ Understand the budget cycle, management and organization of budget processes
$\checkmark$ Budget as an instrument of managerial performance and monitoring and evaluation of budget performance
$\checkmark$ Achieve an understanding of money and capital markets.
$\checkmark$ Become knowledgeable of the theory and application of public sector cash and investment management practices.
$\checkmark$ Gain an understanding of the importance of government banking relations.
$\checkmark$ Analyze financial control strategies including the role of accounting, reporting, and auditing functions of the public sector.

Martin School of Public Policy and Administration - Master of Public Financial Management Proposal
$\checkmark$ Analyze the interrelationships of these issues with the overall public sector financial management process.
$\checkmark$ Prepare financial reports for governmental and not-for-profit entities.
$\checkmark$ Prepare financial reports for state and local governments.
$\checkmark$ Properly account for general funds and special revenue funds.
$\checkmark$ Properly account for capital projects funds, debt service funds, internal service funds, enterprise funds, and fiduciary funds.
$\checkmark$ Prepare financial reports for local and state school systems, colleges and universities, and hospitals and other non-profits.
$\checkmark$ Analyze governmental financial performance.

Data will be collected through a variety of ways including University run teacher course evaluations, student/faculty feedback, and surveys. Teacher course evaluations are to provide scores in excess of the College mean on overall value of course and overall value of instructor. This is expected to be first evaluated in Year 2 with improvements in Year 3. Student will provide feedback on the curriculum evaluation and development. In the years leading up to the first graduating class, selected artifacts from courses across the curriculum will be evaluated using rubrics on an annual basis to inform the faculty as they alter and improve the curriculum. Benchmarks relative to portfolios and course artifacts will be based on appropriate faculty consensus and will be developed after the first initial review process.

Data and findings will be shared with appropriate faculty committees who will analyze and report findings to the full program faculty. Assessment data will also be shared with college wide committees. Both will occur on an annual basis.Evaluation data and information will be provided to the faculty Curriculum Committee who will provide input to the program faculty on necessary changes to the curriculum. This will occur annually. In addition to evaluating a specific student's performance on the program theses, these and the included artifacts will also be measured against program learning outcomes. Faculty analysis will focus on areas in the program learning outcomes that are perhaps not reflected or reflected poorly in portfolios.

Measuring teaching effectiveness will take into account student success in the class room, teacher course evaluations. Among other duties, the faculty will provide feedback and assistance in the area of instruction. Faculty will make use of existing University resources (for example CELT - the Center for the Enhancement of Learning and Teaching) as well. Faculty will receive input and assistance from the E-Learning Staff to make improvements in virtual course delivery strategies. Surveys will be conducted with both graduates and employers of graduates. The survey will focus on the student's perceived success as well as include the employer's perspective of how well the employee was when $s /$ he began their career. Surveys of graduating students will occur annually. Surveys of employers will occur every three years.

## 6. Impact on Kentuckians

The Martin School of Public Policy and Administration is nationally recognized for its academic strengths, outstanding faculty, and a curriculum that combines learning and practice Martin School of Public Policy and Administration - Master of Public Financial Management Proposal
and has for decades been a leader among schools of public policy and administration. The Martin School is currently ranked \#2 by U.S. News and World Report in the area of public finance and budgeting among schools of public administration and policy. By adding the Master in Public Financial Management (MPFM) to its existing degree programs, it will provide students another vehicle to achieve higher goals within their chosen profession in the public and non-profit sectors.

The curriculum is specifically designed for new career entrants as well as seasoned professionals desiring career advancements in public financial management. Beyond the traditional topics of public budgeting and finance, the MPFM will emphasize course content oriented towards public sector accounting, audit, and other financial processes unique to the public sector and often omitted from other programs. The MPFM will make students more effective and valuable within the public sector workforce, preparing them for leadership positions - with the added benefit of a convenient online program offered by a nationally recognized University.

Graduates from the MPFM program will be prepared for a life of public service. The skills they develop and the knowledge they acquire will benefit them in their careers and in their civic activities. Many students will choose careers as public financial managers, budget analysts, public accounting, etc. Courses such as public sector accounting, audit, tax policy, and municipal securities will provide students with precise policy analytic tools for evaluating public financial reports, budget documents, public sector audits and more. The MPFM program will ensure that its graduates are fully prepared for their chosen career path through relevant course work and a final research project. The Martin School's MPA program is accredited by the National Association of Schools of Public Affairs and Administration. There are no licensure requirements for graduates of MPFM programs.

## 7. Impact on Kentucky Communities and Kentucky Economy

The Master of Public Financial Management degree program will enhance Kentucky’s communities and economy by giving students the skills and knowledge to advise local and state policymakers and other community leaders on matters of critical importance to the Commonwealth. Graduates from the MPFM program will have valuable insight into the political and economic forces that shape complex policy and financial decisions.

## E. IMPLEMENTATION PLANS

The Master in Public Financial Management will enhance Kentucky’s academic reputation by attracting high quality, highly motivated students. The program will offer select students a rigorous program of topical content. The Admissions Committee will review each file in an applicant's dossier to admit academically strong applicants that show the greatest potential for completing the program and succeeding in a career. Academic qualifications are accessed based on grade point average, undergraduate major, institutions, GRE scores and academic references.

The Martin School is a nationally-ranked, competitive program. The Admissions Committee reviews each file in an applicant's dossier in order to admit academically strong Martin School of Public Policy and Administration - Master of Public Financial Management Proposal
applicants that show the greatest potential for completing the program and succeeding in a career. Academic qualifications are accessed based on grade point average, undergraduate major, institutions, GRE scores and academic references.

The online Master in Public Financial Management will maintain high standards of admission to assure UK's admission and recruitment policies and decisions for distance learning are equivalent to UK's admission and recruitment standards for traditional degree programs. Students entering the Master in Public Financial Management Program are expected to have at least a 3.0 grade point average (on a 4.0 scale), a cumulative score of $50 \%$ or more on the quantitative and verbal sections of the GRE or a minimum score of $50 \%$ on the GMAT, and letters of recommendation that provide convincing evidence about the applicant's ability and potential.

For working professionals and non-traditional students, online programs provide the flexibility needed to balance work, school, and other obligations. For traditional students, online programs provide opportunities that may not be available to them by traditional routes. Students complete assignments and engage with their without the conventional restrictions of a traditional on-campus environment. The online Master program offers in-state and out-of-state students an affordable option for graduate studies. Students are encouraged to pursue any number of financial aid options available to students who meet University requirements.

The 36-hour online Master of Public Financial Management (MPFM) will offer rigorous academic and practical training for traditional students seeking an advanced degree as well as those currently working within the area of governmental finance and accounting and non-profit organizations. The MPFM builds upon strong foundations in finance and accounting including advanced topics in areas specific to public financial management including government accounting, auditing, securities, pensions/insurance, forecasting and other subjects.

The Master of Public Financial Management Program Termination student performance policies mimic those of the nationally ranked Master of Public Administration Program and will state that a student may be dismissed from the program for any one of the following reasons:

1. Receiving a grade of " C " for any 9 credit hours or three classes.
2. Receiving a grade of "E" for any 3 credit hours.
3. Twice failing the Final Examination.

Students facing termination will be notified and will have an opportunity to discuss the pending action with the Director of Graduate Studies. Appeals are processed through the Student Affairs Committee. Graduate degrees must normally be completed within eight years of the beginning of graduate study. Extensions require a request on the part of the director of graduate studies and approval by the Dean of the Graduate School.

Students who attend online classes will receive the same quality instruction as those attending traditional classes. The Martin School of Public Policy and Administration ensures the Master of Public Financial Management online courses will be provided in an up-to-date format with courses lead by top-notch, nationally recognized faculty. Further, comparability of online distance learning programs to campus-based programs and courses is required by University policy to be evaluated based on student learning outcomes (SLO), retention and student satisfaction.

The Master of Public Financial Management program will have a dedicated program Director to oversee daily operations of the program, including program marketing, admissions, curriculum, student support and other administrative duties. In addition, student support and services will be provided by the University's Distance Learning Programs. Online instructional support will be provided to faculty by the University's Department of E-Learning. http://www.uky.edu/elearning.

The Martin School's Board of Visitors supports the creation of the new program. Current list of Board of Visitors:

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September 3, 2015

Jennifer D. Edwards, eLII Grant Program Manager
IT Planning, Administrative \& Finance Group
CAMPUS 0495

Dear Jennifer:

I am pleased to submit this letter in strong support of the Martin School's eLearning Innovation Initiative (eLII) grant application. This application brings to fruition a project that the Martin School faculty has been closely engaged in planning for several years, to address a statewide and market need for an on-line and flexible Masters of Public Financial Management program.

The Martin School faculty has a long record of excellence in academic planning, as evidenced by their prominent national rankings (\#2 in the US in Public Finance \& Budgeting, US News) as well as the extensive publications and external-funding success across the School. This work has placed the Martin School at the forefront of statewide, national and global conversations about public policy, and has positioned them well to address this market need for "well-trained financial managers for public and non-profit organizations."

The careful research that is part of their academic ethos has also been part of this degree planning, through retreats, market scans, attention to the specifics of online pedagogy, and close consideration of how to develop the degree program and to build cross-listed courses where useful. Following national trends of "stackable credentials," this program will also include a certificate option, to address professional-development needs of public policy officials around the world. The classes will be offered in 8-week and 4-week sessions, to accommodate the needs of a broad professional community that will benefit from this program.

The pre-proposal has already been submitted to the CPE, and the degree program will work its way through the Graduate Council and Senate this semester. The support of the eLII funding will allow them to launch this program at a level that matches their existing record of excellence, and that draws national attention.

I hope the ell program will be able to support the development of this new program, which promises to draw not only national but global professionals; I think this investment will yield significant dividends for UK.

Please don't hesitate to contact me if I can be of further service.
Sincerely,


Susan Carvalho
Interim Associate Provost and Dean
Graduate School


August 20, 2015

Jennifer D. Edwards, MPH, PMP
Grant Program Manager

Dear Jennifer Edwards,
As a faculty member at the Martin School of Public Policy \& Administration with expertise in the economics of taxation and tax policy, I encourage you to approve the program development and implementation funding request for the Martin School's proposed program in Public Financial Management. Tax policy is an important part of state and local finances, and the Martin School of Public Policy has a particular strength in the study of public finance and a long tradition of strength in this area. This strength makes the Martin School uniquely situated to offer a Masters of Public Financial Management to serve in-service students with the proposed on-line program.

Thank you for considering our application for funding to support the implementation of this important program.

Best,


David R. Agrawal
Assistant Professor of Public Policy and Assistant Professor of Economics

Gatton COLLEGE OF BUSINESS \& ECONOMICS
UNIVERSITY OF KENTUCKY UNIVERSITY OF KENTUCKY

September 3, 2015
Jennifer D. Edwards
eLLI Grant Program Manager
Dear Ms. Edwards:
This letter is in support of the Martin School of Public Policy \& Administration's request for implementation support for its proposed Masters of Public Financial Management. The Von Allmen School of Accountancy enthusuatucally supposts the proposed Masters program and has agreed to work to develop three new courses for the program: PA 625 Governmental Accounting and Financial Condition Analysis, PA 627 Governmental Audit, and PA 626 Applications in Governmental Accounting and Audit.

We believe the proposed program offers the University of Kentucky to establish itself as a leader in the field of government financial management. From an accounting perspective there is a tremendous demand for people trained in governmental accounting and finance. While the main purpose of the three courses we propose to develop will be for the Masters of Public Financial Managmenet, they will also be of use in explanding the elective offerings in our current Masters of Science in Accounting.

I agree with the proposal's assessment of the need for such a program. As Professor Hackbart notes in his letter of support - there is a tremedous need for trained accounting and financial personnel at all levels of government. Governmental accounting and auditing is significantly different from accounting and auditing in the non-governmental sector, with its own set of accounting and auditing standards. The needs for additional training to face the complexity of the governmental setting is evident from the most states’ CPA laws requiring a singificant portion of the CPA's continuing ediucation hours to be in governmental accoutning and auditing if they work on governmental clients. Further in the case of intneral auditng, the Institute of Internal Auditor's has developed a specialized certification (the CGAP) for internal auditors workling in governmental settings and created a new center for Governmental Auditing Excellence.

We at the Von Allmen School believe the The Martin School is well position to offer this new online degree. The Martin School has a national reputation for its graduate degrees so that the program should be able to draw from across the US and should be able to operate a size sufficent to generate the finacial resources to be sustatinable on a longterm basis. It also has a competitive advantgage as I am not aware of other programs in accoutning or in public administration which offers this financial management focus.

If you have any additional questions, please call me at (859) 551-5308 or contact me via e-mail at urton.anderson@uky.edu. I will be very happy to provide any additional information I can.

## Urton Anderson <br> Director and EY Professor of Accounting <br> Von Allmen School of Accountancy

September 2, 2015
Jennifer D. Edwards
eLLI Grant Program Manager
Re: Proposed Masters of Public Financial Management
Dear Ms. Edwards:

This letter is in support of the Martin School of Public Policy \& Administration's request for implementation support for its proposed Masters of Public Financial Management. The Martin School faculty unanimously supports the proposed program and views it an on-line degree which has great potential. To our knowledge, there is no competitor degree offered by our peer Colleges and Schools and there is a great need for an online program of this type to serve a national market.

In earlier conversations with the Executive Director of the Association of Governmental Accountants (which has a membership approaching 18,000), the Director indicated that there is a need for a degree of this nature given the large number of in-service finance and budget staff of state and local governments in addition to the demand for such a degree by federal employees. Moreover, , the Governmetn Finance Officers Association (GFOA) has a similar membership composed of finance officers in government, education and nonprofit organizations. In Kentucky, there is a similar need. Kentucky state government and education organizations employ many individuals who have finance and budgetary responsibilities and would benefit from pursuing a MPFM degree.

In designing the degree, the Martin School decided to also offer a Certificate of Public Financial Management as part of the new degree proposal. Students will be able to enroll in a 12 hour certificate progarm as a first step toward pursuing the full masters degree. Students can apply for either the full 36 hour program or the 12 hour certificate program. Certificate program graduates can apply for admission for the Masters of Public Financail Management degree after completing the certificate program if they decide to do so.

The Martin School is uniquely qualified to offer this new on-line degree. The Martin School's MPA degree is ranked among the top 20 such programs, nationally, by U.S. News \& World Report and its’ Public Finance and Budgeting MPA specialization is ranked number 2 in the nation by U.S. News. The Martin School's national ranking and reputation for its excellent budgeting and finance faculty and focus will help insure that the Martin School's new masters and certificate progarms will attract students from around the country and, potentially, internationally.

I apprecaite your consideration of this application for program start-up support. If there is any additonal information you would like, please let me know.

Sincererly.

Merl Hackbart
Interim Director
Martin School of Public Policy \& Administration


August 17, 2015
To whom it may concern:

I am an associate professor in the Martin School of Public Policy \& Administration. As a member of our core faculty who would also participate in delivering the proposed Master of Public Financial Management, I would like to express my wholehearted support for the new program.

Our new program will serve a fundamental need for budget administrators of high skill and integrity. In an age of tight public finances and, across the globe, citizen concerns about the proper usage of their taxes, our program will impart a fundamental understanding of all aspects of the budgetary process and tangible skills related to effectiveness, efficiency, and probity in the handling of citizens' contributions. Delivering the program online will help us reach midcareer professionals in those locations that most need more skill and ethics in the handling of their public finances.

An essential part of the new program will be the Capstone, which all students will write in the final stage of their studies with us. A Capstone is a practical analysis paper of typically about 25 pages, in which each student analyzes a relevant policy or management problem and then, based on their analysis and the knowledge gained in their studies, makes realistic recommendations to alleviate the problem. We have been doing Capstones in the Martin School's Master's programs since 1996. As such, we know what separates feasible from infeasible Capstone topics, and where the main hurdles lie: in the selection of a feasible topic, the development of an appropriate research design, and the writing of a clear and concise document. To tackle these main hurdles for Capstones in the proposed new program, we will require all students to select a problem from within public financial management and from within a jurisdiction of which they have a good understanding. We will work with them to obtain and prepare relevant quantitative data and other evidence. And we will guide them with the writing, also drawing on the UK Writing Center's online document review service.

I sincerely hope that you will support the approval of our proposed program. It will make a small but tangible improvement to how the public's money is handled, in places where this is most necessary.

Yours sincerely,


Nicolai Petrovsky

August 20, 2015
Jennifer Edwards
eLii Grants Manager
Office of Project Management
Analytics \& Technologies
RE: Martin School of Public Policy and Administration Grant Application
Ms. Edwards,
I am currently assisting the Martin School of Public Policy and Administration with the development of a new Masters of Public Financial Management program, to be offered $100 \%$ online. As some background of how and why I am involved with this project, in 1991 I received my Ph.D. from the Martin School. I taught at the University of Arizona's School of Public Administration and during that time, had some experience teaching online courses. I have also served as mayor and worked closely with the Kentucky League of Cities and other governmental agencies in various capacities. My academic background and other experience has given me some insight about the role of online education with the university setting. I have served as adjunct professor for the Martin School in the past and as the new master's program develops, I will be teaching in the program.

The Martin School is ranked \#4 by the Network of Schools of Public Policy and Administration (NASPAA) in public finance and currently offers a Master of Public Administration and a Master of Public Policy. The Martin School has perceived an unmet need for rigorous public financial management, and analytic methodology to answer and analyze complex financial issues in the public sector. The need for enhanced training and professional financial management degree programs has also been recognized by national association's including the Association of Governmental Accountants and the Government Financial Officer's Association. The Martin School seeks to help meet this need by providing a Master of Public Financial Management (MPFM) degree program.

As I have worked to develop the program, I have researched other similar programs and found that in comparison, this new master's program will offer a unique and much needed emphasis public finance and public accounting lacking in other programs. The program is designed for students entering the world of public finance as well as providing an accessible and flexible option for those already working in the field who desire more education.

This will be the first online program offered by the Martin School and we believe it will be positively received by not only students from within Kentucky but national wide and even internationally. The Martin School will maintain the same high-level standards for admission and plans to keep class size small to allow for the same high quality
experience for the students as compared to those students within our traditional masters programs.

The new Masters program is designed to be self sustaining beyond the life of the grant funds. Specifically, the grant funds will be used to supplement the costs of developing the online courses in Year 1 of the program. A 12-hour professional certificate program is also included within the proposal. The certificate program will provide revenue to help sustain the Master's program. In addition, the Martin School is committed to funding the program as necessary to create and maintain a nationally recognized, top-rated online program.

We respectively ask for your support of the new program as the funds from the deLi Grant will help assure the program is implemented in the most effective and efficient way.


Rhonda Riherd Trautman, PhD.
Program Development Consultant

Martin School of Public Policy and Administration
415 Patterson Office Tower
Lexington, KY 40506-0027
859 257-5741
ell Grants Manager
Campus
fax 859 323-1937
www.martin.uky.edu

August 17, 2015

Dear Ms. Edwards:
I am writing in support of the Martin School's new online degree proposal in public financial management. I am an economist specializing in public finance and expect to be involved in the delivery of this degree. It is a unique degree but one that I think will be met with interest because of the increasing demands for financial management expertise in the public sector.

Please contact me if I can provide additional means of support or additional information. This proposal has my complete support.

Sincerely,


## Martin School Faculty Meeting Minutes

## Re: Establishment of MPFM Program

1. Meeting Date: May $12^{\text {th }}, 2015$ (Spring Retreat)

Excerpt:

## New Program Proposals

Rhonda Trautman presented her proposal for two new programs for the Martin School (presentation attached):

- Certificate in Public Financial Management
- New Masters in Public Financial Management

These programs would be online and focused on government employees. There is potentially a large market for the 12 hour/4 course certificate which could be completed in two semesters.

A program coordinator would manage both programs. UK's Distance Learning Program would support students.

The details on how a student is tested are still in the works.

Upon the conclusion of Rhonda's presentation, the faculty members present took a consensus vote at which time approval was given to move forward with the new Master's and Certificate programs in Public Financial Management.
2. Meeting Date : May $21^{\text {st }}, 2014$ (Spring Retreat)

Excerpt:
Online—nonprofit, financial management (30-33 hour strictly online) new degree. We can utilize many of graduates who are already teaching online.

Genia says we need to move ahead b/c otherwise we'll be behind. Merl agrees. We need to decide to do it. Ed agrees. Ed feels that Martin School slow to respond. World is different. All of our competitive programs doing online (totally, blended). SPEA, UNC, everyone moving in that direction. Students different, expect convenience. MPA (not Ph.D). Ed agrees with new degrees b/c consistent with new specialized degrees. Ed likes online financial management given what we're known for. Ed votes to move ahead, Genia seconds, Consensus vote to move ahead.

From:
Sent:
To:
Subject:
Attachments:

Schroeder, Margaret [m.mohr@uky.edu](mailto:m.mohr@uky.edu)
Wednesday, February 17, 2016 10:06 AM
Brothers, Sheila C; Hippisley, Andrew R; Ellis, Janie
Proposed New GC: Public Financial Management Graduate Certificate PFM FINAL .pdf

This is a recommendation that the University Senate approve the establishment of a new Graduate Certificate: Public Financial Management , in the Martin School of Public Policy and Administration within the Graduate School.

Please find the revised proposal attached.

Best-

Margaret
----------
Margaret J. Mohr-Schroeder, PhD | Associate Professor of STEM Education | COE Faculty Council Chair |
SAPC University Senate Committee Chair | University Senator | Secondary Mathematics Program Co-Chair
| STEM PLUS Program Co-Chair | Department of STEM Education | University of Kentucky |
www.margaretmohrschroeder.com


GEW Gralu the Certifíater
(Attach completed "Application to Classify Proposed Program" ${ }^{11}$ )
GENERAL INFORMATION


Date of Contact with Associate Provost for Academic Administration ${ }^{1}$ : NA

| Bulletin (yr \& pgs): | CIP Code $^{1}:$ | 44.0501 | Today's Date: | 7.28 .15 |
| :--- | :--- | :--- | :--- | :--- |

Accrediting Agency (if applicable): NA
Requested Effective Date: $\square$ Semester following approval. $\quad$ OR $\triangle$ Specific Date ${ }^{2}:$ August 2016
Dept. Contact Person: Merl Hackbart $\quad$ Phone: $859-257-1627$ Email: m.hackbart@uky.edu

## CHANGE(S) IN PROGRAM REQUIREMENTS

| 1. | Number of transfer credits allowed | 0 |
| :---: | :---: | :---: |
|  | (Maximum is Graduate schoollimit of 9 hours or $25 \%$ of course work) |  |
| 2. | Residence requirement (if applicable) | NO |
| 3. | Language(s) and/or skill(s) required | NO |
| 4. | Termination criteria | YES |
| 5. | Plan A Degree Plan requirements ${ }^{3}$ (thesis) | NO |
| 6. | Plan B Degree Plan requirements ${ }^{3}$ (non-thesis) NO |  |
| 7. | Distribution of course levels required | 600 |
|  | (A) least one half must be at $600+$ level 8 two-thirds must be in organized courses.) |  |
| 8. | Required courses (if applicable) | 12 |
| 9. | Required distribution of courses within program (if applicable) | 12 |
| 10. | Final examination requirements .......... NO |  |
| 11. | Explain whether the proposed new program (as described in numbers 1 through 10) involve courses offered by another department/program. Routing Signature Log must include approval by faculty of additional department(s). <br> NO |  |

[^5]12. What is the rationale for the proposed new program?

There are few public administration schools in the country providing nationally recognized concentrations in public financial management (the Martin School at the University of Kentucky, the Maxwell School at Syracuse, the University Indiana or to a lesser degree the University of Georgia or the University of Nebraska at Omaha) and few schools provide graduate programs specifically focused on training financial managers for mid-level or senior positions in public and non-profit organizations. The need for enhanced training and professional financial management degree programs has been recognized by national association's including the Association of Governmental Accountants and the Government Financial Officer's Association.

The 12 -hour online certificate program will offer rigorous academic and practical training for traditional students seeking an advanced degree as well as those currently working within the area of governmental finance and accounting and non-profit organizations. The MPFM builds upon strong foundations in finance and accounting including advanced topics in areas specific to public financial management.

# NEW MASTERS DEGREE PROGRAM FORM 

Signature Routing Log

## General Information:

Program Name: Graduate Certifcate in Public Financial Management

INSTRUCTIONS:
Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

## Internal College Approvals and Course Cross-listing Approvals:



## External-to-College Approvals:

| Council | Date Approved | Signature | Approval of Revision ${ }^{4}$ |
| :---: | :---: | :---: | :---: |
| Undergraduate Council <br> Graduate Council | $\begin{gathered} N A \\ q / 3115 \end{gathered}$ | Rosham inhen |  |
| Health Care Colleges Council Senate Council Approval | NA | University Senate Approval |  |

## Comments:

[^6]
# PROPOSAL Graduate Certificate in Public Financial Management 

Submitted by<br>James P. Martin School of Public Policy and Administration

A. Abstract
B. Program Description
Faculty of Record
Certificate Director
Certificate Curriculum
Class Matrix
Course Description
Admission and Other Requirements
Termination
Time and Flexibility
Affordability
Faculty, Graduate Certificate Associates and Affiliates
Administration and Support
Graduate Certificate Director
Format
C. Resource Needs and Availability
D. Program Justification and Outcomes

1. Meeting a Need
2. Reporting and Benchmarking
3. Student Learning Outcomes (SLOs)
4. Recruitment
5. Impact on Kentuckians
6. Impact on Kentucky Communities and Kentucky Economy

## A. ABSTRACT

The Graduate Certificate in Public Financial Management is designed to meet the current and expanding national demand for well-trained financial managers for public and non-profit organizations. The Martin School, because of its historical focus on public finance and financial management and national reputation resulting from its $2^{\text {nd }}$ place national ranking in this area by U.S. News and World Report, is particularly suited to initiate a new program to train students with this focus in cooperation with the Von Allmen School of Accountancy

Governments at all levels as well as non-profit organizations are facing multiple challenges as they attempt to efficiently and effectively manage their finances and initiate new programs that are financially sustainable. Their efforts are made more difficult by their inability to find and attract well-trained financial management graduates who are interested in pursuing careers as financial managers or by their ability to find seasoned professionals prepared to accept the responsibilities associated with senior finance positions in their organizations. The public administration schools and departments have been slow to provide the targeted training and skill sets needed by mid-career professionals or by new graduates desiring a career in public financial management. The Martin School has perceived an unmet need for rigorous public financial management, and analytic methodology to answer and analyze complex financial issues in the public sector.

The Graduate Certificate in Public Financial Management program will prepare students for advanced-careers in public financial management and analysis and will be offered completely online, allowing for non-traditional students and the flexibility of online coursework. This program, a first for the Martin School, will be attractive to students desiring only an introduction of class offerings in public financial management.

The proposed online 12-hour Graduate Certificate Program in Public Financial Management fills an additional niche as an alternative for those who are not interested in seeking a full Master's program. Benefits, requirements, and elements of the Certificate are outlined elsewhere in the proposal.

There are few public administration schools in the country providing nationally recognized concentrations in public financial management (the Martin School at the University of Kentucky, the Maxwell School at Syracuse, the University Indiana or to a lesser degree the University of Georgia or the University of Nebraska at Omaha) and few schools provide graduate programs specifically focused on training financial managers for mid-level or senior positions in public and non-profit organizations. The need for enhanced training and professional financial management degree programs has been recognized by national association's including the Association of Governmental Accountants and the Government Financial Officer's Association.

## B. PROGRAM DESCRIPTION

The 12-hour Graduate Certificate Program will offer rigorous academic and practical training for traditional students seeking an advanced degree as well as those currently working within the area of governmental finance and accounting and non-profit organizations. It builds upon strong foundations in finance and accounting including advanced topics in areas specific to public financial management.

The following section outlines specific elements related to the Graduate Certificate Program which is designed to meet the Graduate School policy and requirements for the establishment and operation of a Graduate Certificate Program with sections including Certificate Curriculum, Certificate Associates/Affiliates, and Certificate Director adapted directly from requirements outlined by the Graduate School.

Faculty of Record: The following page lists three senior faculty members who have agreed to serve as faculty of record for the proposed Graduate Certificate in Public Financial Management. Beyond those listed, future faculty will be selected one of two ways: from the graduate faculty of the supporting departments (Martin School of Public Policy and Administration and the Von Allmen School of Accountancy) or through a hiring process which will screen applicants for appropriate credentials. If visiting or other faculty are selected to serve as course instructors, the Martin School will approve only those instructors with appropriate credentials to qualify as temporary appointments to the UK Graduate Faculty and/or to meet AQ status as reported to our accrediting body NASPAA and SACS. If a faculty of record was to become ineligible for any reason, the position could be filled temporarily or permanently by the graduate faculty of the departments or selected through the aforementioned process.

- Dr. Merl Hackbart, Interim Director

Martin School of Public Policy and Administration
University of Kentucky
859-257-1627, m.hackbart@uky.edu
I, MEBL HxckBA, plan to serve as a faculty member and instructor as part of the new online Master's in Public Financial Management degree program. As an instructor, I have offered my support for the program and will be teaching courses in my area of expertise-public financial management.


- Dr. Dwight Denison, Professor of Public \& Nonprofit Finance

Martin School of Public Policy and Administration
University of Kentucky
859-257-5742, dwight.denison@uky.edu
I, Dwibar Denian, plan to serve as a faculty member and instructor as part of the new online Master's in Public Financial Management degree program. As an instructor, I have offered my support for the program and will be teaching courses in my area of expertise-public financial management.


- Dr. Eugenia Toma, Wendell H. Ford Professor of Public Policy

Martin School of Public Policy and Administration
University of Kentucky
859-257-1156, eugenia.toma@uky.edu
I, Eugenia Tome, plan to serve as a faculty member and instructor as part of the new online Master's in Public Financial Management degree program. As an instructor, I have offered my support for the program and will be teaching courses in my area of expertise -public financial management.



Certificate Director: The Certificate Director position has not been finalized. Until then, Dr. Merl Hackbart is considered the Certificate Director for the Graduate Certificate in Public Financial Management.

Certificate Curriculum: Classes are offered as 8-week and 4-week sessions during the regular University Fall/Spring Sessions. The Graduate Certificate Program consists 12 - hours of credit with two 8-week courses will be offered sequentially in the Fall/Spring Semesters. Persons interested in an introduction or review of coursework in Public Financial Management without investing in a full Master Program may apply to the online Graduate Certificate Program which includes 4 mandatory courses (PA 631, PA 632, PA 625, and PA 626) or a total of 12-hours of online coursework. The length of the Graduate Certificate Program curriculum provides minimum core content, yet it is clearly distinguishable from a degree program. The courses will be offered annually allowing students to complete the certificate in two semesters. The Graduate Certificate Program in Public Financial Management has a clear and focused academic goal and it meets the need of a constituency group by providing basic competency in the field of public financial management. The need for educational opportunities in this area has been noted by professional associations such as the Government Finance Officers Association. The Graduate Certificate Program is designed to provide those with an interest in improving their work performance and those needing a familiarization with the aspects of public financial management. The Certificate is also a way for employers in the public sector to add value and professional development training for their employees.

## Class Matrix

| Fall 8 Week Session 1 | Fall 8 Week Session 2 | Spring 8 Week Session 1 | Spring 8 Week Session 2 |
| :---: | :---: | :---: | :---: |
| PA 631 <br> Public Financial <br> Management: <br>  <br> Debt <br> Management <br> Certificate <br> 3 Hours | PA 632 <br> Public Funds <br> Management <br> Certificate <br> 3 Hours | $\text { PA } 625$ <br> Governmental Accounting and Financial Condition Analysis <br> Certificate <br> 3 Hours | $\text { PA } 626$ <br> Applications in Government Accounting and Audit Certificate <br> 3 Hours |
| RED = New Courses BLUE = Existing Courses |  |  |  |

Course Descriptions: The following section contains course descriptions for the twelve credit hours courses making up the Graduate Certificate Program.

PA 631 Public Financial Management: Budgeting/Debt Management (existing course)
An analysis of budget structure and process, revenue structure, administration, public capital acquisition and debt management. This course emphasizes an applied focus and comparative analysis of alternative budget, revenue, and debt management structures and strategies. (Certificate/Core)

## PA 632 Investments/Cash Management (existing course)

A study of the management of public funds including the accumulation and investment of such funds and the accounting for those transactions. It will also include topics such cash forecasting, cash management practices and public funds investment strategies. (Certificate/Core)

## PA 625 Governmental Accounting and Financial Condition Analysis (new course)

The course will examine the characteristics of governmental and nonprofit accounting emphasizing the various fund types and account groups, review and evaluation of presently recommended accounting and financial reporting procedures (GAAP, and an exploration of practical governmental and nonprofit accounting practices and methods. (Certificate/Core)

## PA 626 Applications in Governmental Accounting and Audit (new course)

Gain hands-on experience with case studies designed to simulate real-world scenarios and common problems in today's public sector. This course goes beyond the theory and will demonstrate how to navigate the key issues that arise in governmental and not-for-profit accounting and auditing. (Certificate/Core)

Admission and Other Requirements: The online Graduate Certificate Program will maintain high standards of admission to assure UK's admission and recruitment policies and decisions for distance learning are equivalent to UK's admission and recruitment standards for traditional degree programs. Students entering the program are expected to have at least a 3.0 grade point average (on a 4.0 scale), a cumulative score of $50 \%$ or more on the quantitative and verbal sections of the GRE or a minimum score of $50 \%$ on the GMAT, and letters of recommendation that provide convincing evidence about the applicant's ability and potential.

Applicants to the Graduate Certificate in Public Financial Management must be approved for admission by the Certificate Director, who shall notify the Graduate School of the student's admission. Although formal admission to a Public Financial Management Graduate Certificate is handled by the Director of the Graduate Certificate Program at the Martin School, a student seeking to pursue a Graduate Certificate must also apply to and meet all requirements of the Graduate School, and be enrolled as a graduate student at the University of Kentucky.

Upon admission to the Graduate Certificate Program, students will take four (4) 8-week sequential classes starting in the Fall. Students in Graduate Certificate Program are encouraged to complete the 4 courses within a calendar year during the Fall/Spring semesters. Students must have at least a cumulative 3.0 GPA in Certificate Coursework upon completion to be awarded a Certificate from the Martin School. Courses included in the Graduate Certificate Program are noted as "Certificate" courses in the Class Matrix included elsewhere in this proposal.

Upon completion of the Graduate Certificate Program, students may transfer the coursework to other post-secondary institutions or 12 hours of credit may be applied towards fulfillment of the 36-hour Master in Public Financial Management Program, upon achieving full admission to the Master in Public Financial Management Program. Admission to or completion of a Graduate Certificate does not guarantee subsequent admission to a graduate degree program.

Termination: Student performance policies mimic those of the nationally ranked Master of Public Administration Program and will state that a student may be dismissed from the program for any one of the following reasons:

1. Receiving a grade of " C " for any 9 credit hours or three classes.
2. Receiving a grade of "E" for any 3 credit hours.
3. Twice failing the Final Examination.

Students facing termination will be notified and will have an opportunity to discuss the pending action with the Director of Graduate Studies. Appeals are processed through the Student Affairs Committee.

Time and Flexibility: For working professionals and non-traditional students, an online program provides the flexibility needed to balance work, school, and other obligations. For traditional students, an online program provides an opportunity to seeking certification from a university that may not be available to them by traditional routes. Via the University's Department of Distance Learning and the Martin School of Public Policy and Administration, students complete assignments and engage with their faculty without the conventional restrictions of a traditional on-campus environment.

Affordability: Students accepted into the online Graduate Certificate Program pay in-state tuition rates, as required by the University. The online program offers in-state and out-of-state students an affordable option for graduate studies. Students are encouraged to pursue any number of financial aid options available to students who meet University requirements.

Faculty, Graduate Certificate Associates or Affiliates: The Graduate Certificate Program in Public Financial Management will be taught by highly recognized faculty. At all times as required by the Graduate School, a minimum of three of these Associates shall be members of the Graduate Faculty. Courses will be taught by faculty with expertise in the areas of public budgeting, debt/cash management, governmental accounting/audit and other topics relevant to public financial management. All faculty and instructors will have backgrounds and expertise in relevant areas of instruction, with some being located at other leading Universities across the country, adding to the diversity of instruction and network opportunities for students.

Administration and Support: Students who attend online classes will receive the same quality instruction as those attending traditional classes. The Martin School of Public Policy and Administration ensures the online courses will be provided in an up-to-date format with courses lead by top-notch, nationally recognized faculty. Further, comparability of online distance learning programs to campus-based programs and courses is required by University policy to be evaluated based on student learning outcomes (SLO), retention and student satisfaction.

Graduate Certificate Director: The Graduate Certificate Program in Public Financial Management graduate will have a designated Director, who shall be appointed by the Dean of the Graduate School. The Director will speak for the certificate curriculum and its Associates on matters such as admission to and successful completion of the graduate certificate by students, enforcement of certificate requirements, maintenance of records, and other administration functions. As required by the Graduate School, the Director must be a member of the Graduate Faculty of the University. The Director will oversee daily operations of the program, including program marketing, admissions, curriculum, student support and other administrative duties. In addition, student support and services will be provided by the University's Distance Learning Programs. Online instructional support will be provided to faculty by the University's Department of E-Learning. http://www.uky.edu/elearning.

Format: Students seeking the flexibility of online instruction will experience a combination of self-study and student-faculty interaction over an online learning network. Students will complete weekly assignments, readings, exams and other activities with the same level of rigor and expectations of other traditional Master programs offered by the Martin School of Public Policy and Administration. Students will receive registration and course information by way of the University Distance Learning Program. http://www.uky.edu/DistanceLearning and the Martin School. The Martin School website will provide a dedicated portal for students to access and enroll in courses and other program support.

## C. RESOURCE NEEDS AND AVAILABILITY

The Graduate Certificate Program will be delivered online and will be the first online program for the Martin School and its collaborating partner, the Von Allmen School of Accountancy. As a new program, the financial plan involves several steps and includes costs in three general categories:

- Program development costs associated with the design of 2 new online courses and redesign/conversion of 2 existing courses to online format.
- Program operational costs associated with administration, program management, marketing and technical assistance;
- Faculty and staff/graduate assistant compensation costs associated with the online program.

The Proposal timeline begins Year 1 with implementation of the online 12-hour/4 course Graduate Certificate Program with 25 students. In Year 2, the Graduate Certificate Program expands from 25 to 50 students. The Program stabilizes in Year 3 with 50 Graduate Certificate Program Students. The following section outlines the budget for the Graduate Certificate Program. Due to the fact that the Graduate Certificate Program is embedded within the newly created Masters of Public Financial Management, proposed elsewhere, the following budget includes the revenues and expenses for the entire program. Further, revenue from the Graduate Certificate Program is expected to support activities related to operation of the Graduate Certificate Program as well as generate revenue to assist with the development and implementation of the 36 -hour Master of Public Financial Management Program proposed elsewhere. Because the new program is implemented in phases, the proposed budget for the Graduate Certificate Program (outlined below) includes projected revenue and program startup/operational costs for Year 1, 2 and 3 along with costs/revenues associated with the corresponding Masters of Public Financial Management Program (proposed elsewhere).

Budgeted revenues specifically generated by the Graduate Certificate Program include 1) Graduate Certificate Tuition and 2) Distance Learning Fees as defined by the University. The Martin School will also submit a request for $\$ 197,502$ to the 2015 E-Learning Innovation Initiative (eLII) to assist with program development start-up costs (e.g., technical course development, instructional design, faculty skill development, marketing, and project management). This revenue is included in Year 1 only. See budget summary for details.

In addition, the University E-Learning program provides $\$ 3,000$ stipends directly to faculty per new course via the E-Learning + Innovation Design Lab (Faculty Skill Development) RFA to assist with course design, online teaching strategies, faculty training, and development. This last category is considered indirect revenue and not included directly in the proposed budget but will generate up to $\$ 36,000$ in stipends for the faculty.

The following Budget outlines revenues and expenses for Year 1-3. Items in Year 1 highlighted in GREEN include program startup costs associated with the first year's program marketing, administration, faculty course development summer salary and other technical support involved in an online program. These expenses, totaling $\$ 197,502$ are included in the Martin School’s 2015 E-Learning Innovation Initiative (eLII) grant application. In Year 2, the remaining 6 online courses will be developed. Course development expenses are included as "Faculty Course Development" and are based on a median faculty salary of \$130,000 and 0.11 FTE summer rate plus benefits at 22

Public Financial Management Program

| YEAR 1 Graduate Certificate Program Begins |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| REVENUE | Students | Unit |  | NOTES |
| Certificate Tuition Fee ${ }^{1}$ | 25 | \$596/credit | \$178,800 |  |
| Distance Learning Fee ${ }^{2}$ | 25 | \$360 | \$9,000 |  |
| E-Learning Innovation Initiative Grant |  |  | \$197,502 | One-time allocation for startup |
| TOTAL DIRECT REVENUE |  |  | \$385,302 |  |
| EXPENSES |  |  |  |  |
| Program Director* |  |  | \$40,000 |  |
| Program Director Benefits* |  |  | \$8,800 | Based on 22\% |
| Teaching Assistant |  | 1 | \$26,200 | Includes Waived Tuition |
| Marketing/Travel* |  |  | \$20,000 |  |
| Faculty Course Development* |  | \$18,117/class | \$108,702 | 6 classes - based on 0.11 summer median salary \$130,000 + benefits |
| Admin Tech Support* |  |  | \$20,000 | 0.50 FTE |
| Instruction (CERTIFICATE) |  | \$12,500/class | \$50,000 | 4 Courses <br> Average/Course = <br> \$12,500 |
| Misc Expenses |  |  | \$10,000 |  |


| TOTAL EXPENSES | $\$ 283,702$ |
| :--- | :--- |
|  |  |
| NET REV/EXP | $\$ 101,600$ |


| REVENUE | Students | Unit |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Certificate Tuition Fee ${ }^{1}$ | 50 | \$596/credit | \$357,600 |  |
| Distance Learning Fee ${ }^{2}$ | 50 | \$360 | \$18,000 |  |
| Master Students Tuition ${ }^{3,4}$ | 20 | \$10,768 | \$215,360 |  |
| TOTAL DIRECT REVENUE |  |  | \$590,960 |  |
| EXPENSES |  |  |  |  |
| Program Director ${ }^{5}$ |  |  | \$80,000 |  |
| Benefits |  |  | \$17,600 | Based on 22\% |
| Teaching Assistant |  | 3 | \$78,600 | Includes Waived Tuition |
| Marketing/Travel |  |  | \$15,000 |  |
| Faculty Course Development |  | \$18,117/class | \$108,702 |  |
| Admin Tech Support |  |  | \$20,000 | 0.50 FTE |
| Instruction (CERTIFICATE-2 sections) |  | \$12,500 | \$100,000 | 8 Courses <br> Average/Course = <br> \$12,500 <br> 4 Courses Average <br> /Course = \$12,500 |
| Instruction (Master Program) |  | \$12,500 | \$50,000 | Assumes Program Director will be teaching 2 courses. |
| Misc Expenses |  |  | \$10,000 |  |
| TOTAL EXPENSES |  |  | \$479,902 |  |
| NET REV/EXP |  |  | \$111,058 | 23\% |

## YEAR 3 Certificate and Master Program Fully Established

| REVENUE | \#Students | Unit |  |  |
| :--- | :---: | :---: | :---: | :--- |
| Certificate Tuition Fee $^{1}$ | 50 | $\$ 596 /$ credit | $\$ 357,600$ |  |
| Distance Learning Fee $^{2}$ | 50 | $\$ 360$ | $\$ 18,000$ |  |
| Master Students Tuition |  |  |  |  |
| TOTAL REVENUE | 40 | $\$ 10,768$ | $\$ 430,720$ | target of 20/year |
|  |  |  | $\$ 806,320$ |  |
| EXPENSES |  |  |  |  |
| Program Director |  |  | $\$ 80,000$ |  |
| Benefits |  |  | $\$ 17,800$ | Based on 22\% |
| Teaching Assistant |  | $\$ 104,800$ | Includes Waived Tuition |  |
| Marketing/Travel |  | $\$ 15,000$ |  |  |
| Admin Support |  | $\$ 12,500$ | $\$ 100,000$ | 2 Sections of Certificate |

\(\left.$$
\begin{array}{|lll|} & & \begin{array}{l}\text { 10 Courses } \\
\text { Average/Course }= \\
\$ 12,500\end{array}
$$ <br>
Instruction (Master Program) \& \$ 12,500 \& \$ 125,000 <br>
Assumes Program <br>
Director will be teaching <br>

two courses.\end{array}\right\}\)| $\$ 10,000$ |
| :--- |
| TOTAL EXPENSES |

[^7]
## D. PROGRAM JUSTIFICATION AND OUTCOMES

## 1. Meeting a Need

The Graduate Certificate Program is designed to meet the needs of several specific groups of potential students. The major potential student group includes in-service professionals who are in finance, budgeting, accounting or audit positions who desire to enhance their understanding of emerging financial management strategies and policies to enhance their opportunities for career advancement. Another potential student group includes recent graduates who desire to enter the field of public financial management and are seeking rigorous graduate degrees which will prepare and jump start their career opportunities.

In addition to these potential student groups, the program will be attractive to professionals in consulting firms, accounting firms that specialize in governmental and nonprofit accounting as well as staff in other private firms that focus on public financial management issues such as rating agencies and municipal security underwriting firms.

The Martin School will be the one of only a few institutions in the county and the only institution in Kentucky to offer a Graduate Certificate in Public Financial Management. Other Kentucky institutions that offer the MPA degree include Western Kentucky University, Northern Kentucky University, the University of Louisville, and Eastern Kentucky University. All of these programs have broad curriculums addressing management as well as public policy. None of these programs require courses such as public sector accounting, auditing, tax policy, municipal securities, public pensions/insurance, forecasting, etc. that serve as core classes within the proposed Graduate Certificate Program.

## 2. Reporting and Benchmarking:

There will be two different kinds of periodic assessment: (1) programmatic assessment and (2) student assessment. For (2) we will use the standard assessment exercise adopted for our existing Masters programs: student learning outcomes measured against specified rubrics. For (1) the Martin School will use student evaluations for individual courses, and schedule periodic program reviews. We will also monitor graduation rates and graduate destinations.

There will be two different kinds of periodic assessment: (1) programmatic assessment and (2) student assessment. For (2) we will use the standard assessment exercise adopted for our existing Masters programs: student learning outcomes measured against specified rubrics. For (1) we will use student evaluations for individual courses, and schedule periodic program reviews. We will also monitor graduation rates and graduate destinations.
3. Student Learning Outcomes (SLOs)

The intended student core learning outcomes of the MPFM:
$\checkmark$ Understand the process, structures, and underlying logic of financial administration in the public sector including budgeting and debt management including securities, working with bond counsel, etc.
$\checkmark$ Have knowledge of basic principles in that relate to public budgeting and the budgetary process.
$\checkmark$ Identify differences in revenue processes, revenue sources, revenue forecasting, and budgetary challenges that exist between different levels of government.
$\checkmark$ Identify and understand the politics associated with public budgeting at each stage in the process, among participants, and at various levels of government.
$\checkmark$ Understand stabilization policy, financing the budget and budget deficits
$\checkmark$ Understand the budget cycle, management and organization of budget processes
$\checkmark$ Budget as an instrument of managerial performance and monitoring and evaluation of budget performance
$\checkmark$ Achieve an understanding of money and capital markets.
$\checkmark$ Become knowledgeable of the theory and application of public sector cash and investment management practices.
$\checkmark$ Gain an understanding of the importance of government banking relations.
$\checkmark$ Analyze financial control strategies including the role of accounting, reporting, and auditing functions of the public sector.
$\checkmark$ Analyze the interrelationships of these issues with the overall public sector financial management process.
$\checkmark$ Prepare financial reports for governmental and not-for-profit entities.
$\checkmark$ Prepare financial reports for state and local governments.
$\checkmark$ Properly account for general funds and special revenue funds.
$\checkmark$ Properly account for capital projects funds, debt service funds, internal service funds, enterprise funds, and fiduciary funds.
$\checkmark$ Prepare financial reports for local and state school systems, colleges and universities, and hospitals and other non-profits.
$\checkmark$ Analyze governmental financial performance.
Data will be collected through a variety of ways including University run teacher course evaluations, student/faculty feedback, and surveys. Teacher course evaluations are to provide scores in excess of the College mean on overall value of course and overall value of instructor. This is expected to be first evaluated in Year 2 with improvements in Year 3. Student will provide feedback on the curriculum evaluation and development. In the years leading up to the first graduating class, selected artifacts from courses across the curriculum will be evaluated using rubrics on an annual basis to inform the faculty as they alter and improve the curriculum. Benchmarks relative to portfolios and course artifacts will be based on appropriate faculty consensus and will be developed after the first initial review process.

Data and findings will be shared with appropriate faculty committees who will analyze and report findings to the full program faculty. Assessment data will also be shared with college wide committees. Both will occur on an annual basis. Evaluation data and information will be provided to the faculty Curriculum Committee who will provide input to the program faculty on necessary changes to the curriculum. This will occur annually. In addition to evaluating a specific student's performance on the program theses, these and the included artifacts will also be measured against program learning outcomes. Faculty analysis will focus on areas in the program learning outcomes that are perhaps not reflected or reflected poorly in portfolios.

Measuring teaching effectiveness will take into account student success in the class room, teacher course evaluations. Among other duties, the faculty will provide feedback and assistance in the area of instruction. Faculty will make use of existing University resources (for example CELT - the Center for the Enhancement of Learning and Teaching) as well. Faculty will receive input and assistance from the E-Learning Staff to make improvements in virtual course delivery strategies. Surveys will be conducted with both graduates and employers of graduates. The survey will focus on the student's perceived success as well as include the employer's perspective of how well the
employee was when s/he began their career. Surveys of graduating students will occur annually. Surveys of employers will occur every three years.

## 4. Recruitment

Martin School faculty and staff currently recruit students using a variety of methods. Faculty and staff visit public and private undergraduate institutions within Kentucky to meet with students and provide them with brochures about the Martin School and its programs. They also contact prospective students by telephone to answer questions. The Martin School also works to recruit students from institutions across the nation. Efforts are primarily focused on sending information about master's and doctoral programs to faculty advisors in political science, economics, and policy programs. Faculty members also indirectly recruit students through their collegial relationships with faculty at other institutions.

The recruitment of non-traditional students is facilitated through the Martin School’s regular interactions with public agencies, and nonprofit organizations. The Martin School will interact directly with professional associations such as the Government Finance Officers Association, Association of Governmental Accountants, the National League of Cities, Kentucky Education Association, school districts, and other groups to recruit potential students.

The Martin School also fundamentally values the recruitment of minority students. It shares the University's commitment to offering more minorities with access to graduate education. The first step in providing access is to make sure undergraduate students are made aware of opportunities in public administration. To this end, faculty, staff, and students attend such events as the University of Louisville's Minority Recruitment Day to have personal interactions with students. The second step is to insure that minority students apply for targeted fellowships and scholarships. All minority students who request information packets are provided with information about special opportunities funding through the graduate school, including the Commonwealth Incentive Award, a non-competitive source of tuition funds for full- and part-time students.

## 3. Impact on Kentuckians

The Martin School of Public Policy and Administration is nationally recognized for its academic strengths, outstanding faculty, and a curriculum that combines learning and practice and has for decades been a leader among schools of public policy and administration. The Martin School is currently ranked \#2 by U.S. News and World Report in the area of public finance and budgeting among schools of public administration and policy. By adding the Certificate Program to its existing degree programs, it will provide students another vehicle to achieve higher goals within their chosen profession in the public and non-profit sectors.

The curriculum is specifically designed for new career entrants as well as seasoned professionals desiring career advancements in public financial management. Beyond the traditional topics of public budgeting and finance, the Graduate Certificate Program will emphasize course content oriented towards public sector accounting, audit, and other financial processes unique to the public sector and often omitted from other programs. The Graduate Certificate Program will make students more effective and valuable within the public sector workforce, preparing them for leadership positions - with the added benefit of a convenient
online program offered by a nationally recognized University.
Graduates from the Graduate Certificate Program will be prepared for a life of public service. The skills they develop and the knowledge they acquire will benefit them in their careers and in their civic activities. Many students will choose careers as public financial managers, budget analysts, public accounting, etc. Courses such as public sector accounting, audit, tax policy, and municipal securities will provide students with precise policy analytic tools for evaluating public financial reports, budget documents, public sector audits and more. The Graduate Certificate Program will ensure that its graduates are fully prepared for their chosen career path through relevant course work and a final research project. The Martin School’s MPA program is accredited by the National Association of Schools of Public Affairs and Administration. There are no licensure requirements for graduates of Graduate Certificate Program.

## 4. Impact on Kentucky Communities and Kentucky Economy

The Master of Public Financial Management degree program will enhance Kentucky’s communities and economy by giving students the skills and knowledge to advise local and state policymakers and other community leaders on matters of critical importance to the Commonwealth. Graduates from the Graduate Certificate Program will have valuable insight into the political and economic forces that shape complex policy and financial decisions.

The Martin School's Board of Visitors supports the creation of the new program. Current list of Board of Visitors:

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## Martin School Faculty Meeting Minutes

## Re: Establishment of MPFM Program

1. Meeting Date: May $12^{\text {th }}, 2015$ (Spring Retreat)

Excerpt:

## New Program Proposals

Rhonda Trautman presented her proposal for two new programs for the Martin School (presentation attached):

- Certificate in Public Financial Management
- New Masters in Public Financial Management

These programs would be online and focused on government employees. There is potentially a large market for the 12 hour/4 course certificate which could be completed in two semesters.

A program coordinator would manage both programs. UK's Distance Learning Program would support students.

The details on how a student is tested are still in the works.

Upon the conclusion of Rhonda's presentation, the faculty members present took a consensus vote at which time approval was given to move forward with the new Master's and Certificate programs in Public Financial Management.
2. Meeting Date : May $21^{\text {st }}, 2014$ (Spring Retreat)

Excerpt:
Online—nonprofit, financial management (30-33 hour strictly online) new degree. We can utilize many of graduates who are already teaching online.

Genia says we need to move ahead b/c otherwise we'll be behind. Merl agrees. We need to decide to do it. Ed agrees. Ed feels that Martin School slow to respond. World is different. All of our competitive programs doing online (totally, blended). SPEA, UNC, everyone moving in that direction. Students different, expect convenience. MPA (not Ph.D). Ed agrees with new degrees b/c consistent with new specialized degrees. Ed likes online financial management given what we're known for. Ed votes to move ahead, Genia seconds, Consensus vote to move ahead.

From:
Sent:
To:
Subject:
Attachments:

Schroeder, Margaret [m.mohr@uky.edu](mailto:m.mohr@uky.edu)
Tuesday, February 16, 2016 11:45 AM
Brothers, Sheila C; Hippisley, Andrew R; Ellis, Janie
Graduate Certificate: Improving Healthcare Value
Improving HealthCare Value Graduate Certificate 02102016.pdf

## Proposed New Graduate Certificate: Improving Healthcare Value

This is a recommendation that the University Senate approve the establishment of a new Graduate Certificate: Improving Healthcare Value within the College of Public Health.

Please find the revised proposal attached.

Best-
Margaret

Margaret J. Mohr-Schroeder, PhD | Associate Professor of STEM Education | COE Faculty Council Chair | SAPC University Senate Committee Chair | University Senator | Secondary Mathematics Program Co-Chair | STEM PLUS Program Co-Chair | Department of STEM Education | University of Kentucky | www.margaretmohrschroeder.com

College of Public Health<br>in collaboration with the<br>Gatton College of Business and Economics College of Engineering University of Kentucky

# Proposal for a New Graduate Certificate in Improving Healthcare Value (CIP Code 51.0702) 

## I. BACKGROUND

The United States devotes nearly 18 percent of its gross national product to health care and the rate of growth has exceeded other sectors of our nation's economy for many years. In spite of this large investment, landmark studies by the Institute of Medicine, the Commonwealth Fund, and other organizations show the USA lags behind other developed nations on multiple metrics of population health such as infant mortality and life expectancy. ${ }^{1}$ Moreover, there is strong evidence of disparities across the USA in access, cost, and quality of health care services. ${ }^{2}$

Thus, we are confronted by a troublesome paradox. The USA spends a large and growing proportion of our nation's resources on health care, but the outcomes in terms of access to services, the quality of those services, and the health of our population do not match other countries whose spending per capita is much less. Many factors contribute to this paradox --demographic, economic, environmental, lifestyle, and social --- and all warrant societal attention. However, given their prominent social role and the magnitude of economic resources they consume, growing scrutiny is being given to America's hospitals, health systems, and academic medical centers.

Key stakeholders including public and private payors, state and federal government regulators, bond rating agencies, the media, and the public-at-large are demanding more transparency and better performance by these institutions and their clinical, executive, and governance leaders. ${ }^{3}$ Payors are shifting from traditional, fee-for-service payment systems to value-based models, and it is imperative for health care providers to more effectively control operating and capital costs

[^8]while concurrently improving patient care quality and safety. ${ }^{4}$ Meeting these dual challenges will require strong, collaborative leadership by clinical (physicians, nurses, pharmacists, and others), executive, and financial leaders in America's healthcare organizations.

## II. PURPOSE OF THE PROPOSED GRADUATE CERTIFICATE

This Graduate Certificate is intended to create educational opportunities for UK graduate students in a range of disciplines, for UK HealthCare staff, and for other healthcare workers to enhance their knowledge and skills related to improving the value (quality and cost) of health care services provided by hospitals, health systems, and academic medical centers. Completing the 15 semester credit hour curriculum will provide $(A)$ instruction in one of three elective tracks, (B) formal certification in improving healthcare value by the University of Kentucky, and (C) substantial credit toward meeting the requirements for a MBA, MHA, or MPH degree.

## III. PROGRAM LEADERSHIP

This is an inter-disciplinary program and will be led by a small team composed of senior faculty members from the College of Public Health, the College of Business and Economics, and the College of Engineering. Initially the team will be chaired by Dr. James Holsinger who, in this capacity, will serve as Certificate Director. The Faculty of Record initially will be composed of the following members:

| Name: | College: | Graduate Faculty Status: |
| :--- | :--- | :--- |
| James Holsinger, MD, PhD | Public Health (Chair) | Full |
| Sarah Wackerbarth, PhD | Public Health | Full |
| Abbott Maginnis, PhD | Engineering | Associate |
| Giuseppe (Joe) Labianca, PhD | Business and Economics | Full |
| Steven Skinner, DBA | Business and Economics | Full |

If a faculty member becomes ineligible to serve on the Faculty of Record, the remaining Faculty of Record members will meet and vote in a replacement.

## IV. CERTIFICATE PROGRAM CURRICULUM

## A. THE CURRICULUM MODEL:

[^9]The curriculum model for this Certificate Program will require five courses (total of 15 semester credit hours). Applied experiences are included in some of the required coursework, and elective participation in a one-week Lean System Certification Program offered by the College of Engineering is encouraged. The curriculum model includes coursework in three alternative tracks: clinical leadership, finance and business, and quality and safety improvement. All courses listed in the three tracks currently are being taught except for CPH 755, "Leading Change with Healthcare Teams," which is a new course.

## B. REQUIRED COURSES IN THE THREE ALTERNATIVE TRACKS

The required three hour foundational course is CPH 600, "Health Services and Systems Organization," which also is listed as HA 601, "U. S. Health Care." CPH 600 provides an introduction to the organization of health services and health systems in the United States. Topics include the health system's composition, functions, organizations and professional groups, settings, financing, and major problems and policy issues.

If a student has considerable work experience (at least three years) in the health field, with the approval of the Certificate Director, CPH 600 can be waived, and the student may take another course within the track they have elected to fulfill the certificate requirement of 15 credit hours.

## CLINICAL LEADERSHIP TRACK

For students who elect the track in clinical leadership, two additional courses, CPH 755 and MGT 697, will be required. In addition, students will complete two (2) courses from the list of approved electives or another course(s) approved as a substitute by the Certificate Director. Electives will be reviewed periodically as necessary by the Certificate Director in consultation with the Faculty of Record and the faculty of record. All newly approved electives will be at the 600 -level or higher.
(1) CPH 755, "Leading Change with Healthcare Teams." (Three Semester Hours). This three credit hour course will focus on skill development in using teamwork to achieve leadership goals in health care delivery; identification of key features of successful teams and factors that lead to team failures; and identification of specific behaviors and communications that enhance effective team interaction.
(2) MGT 697, "Leadership, Communication, and Ethics." (Three Semester Hours). This course is designed to help develop and apply the most vital and relevant skills required in today's competitive and demanding world of work. Your employers, colleagues, subordinates, and customers expect you to use interpersonal, leadership, communication, team-building, and decision-making skills with professionalism, expertise, and integrity. They look to you to not only show competence in delivering results, but also to deliver those results while coping with ambiguity, adversity, and conflict. They expect complete integrity.

The distinctive feature of this course is that it is designed predominantly to allow you to actually work on yourself. Your own personal change, development, and improvement are our objectives. "Book" knowledge is not the sole emphasis, although you certainly will be offered key actionable principles that will empower you to become a better leader, manager, and worker. You will learn about yourself. You will come to improve yourself. You will then be able to work with others in helping them optimize their own personal effectiveness.

- HA 604, "Healthcare Ethics and Governance." (Three Semester Hours). This course addresses the basic concepts and principles of healthcare ethics ...- including the biomedical, managerial, and organizational components --- and applies them using case studies, role playing, and analytical exercises. The course also examines the roles and responsibilities of healthcare governing boards and factors that influence their effectiveness.
- CPH 614, "Managerial Epidemiology." (Three Semester Hours). This course equips students with basic skills in the field of epidemiology and its application in the field of healthcare management and leadership. This course applies and integrates the principles and tools of epidemiology to the decision-making in a health care environment. It is intended for epidemiologists, managers, and clinical nurse executives and leaders who want to understand the value of epidemiology and population-based health care to the process of rational decision-making. The course builds upon fundamental epidemiologic principles and theory, with specific applications to health services.
- CPH 752. "Leadership in Health Organizations." (Three Semester Hours). This course is designed to explore the dimensions of leadership as presented in both traditional and contemporary literature. It focuses student understanding on their leadership qualities and the ways to apply them effectively in the contemporary environment.
- CPH 758, "Special Topics in Health Management and Policy," (Three Semester Hours). A special section of this course will teach students how to conceptualize, design, and plan consumer- and patient-oriented research studies, both from a population and clinical perspective. Students will learn how to formulate research ideas, select appropriate study design, and identify valid and reliable measures of health-related quality of life and consumer assessment or care.
- MGT 611, "Managing Effective Organizations." (Three Semester Hours). A critical examination of behavior and performance within organizations and between organizations. Special attention is paid to the problem of performance at the individual, group, and formal organizational level.


## FINANCE AND BUSINESS TRACK

For students who elect the track in finance and business, four additional courses will be required. These four courses and their prerequisites are: ${ }^{5}$
(1) ACC 628, "Financial/Managerial Accounting." (Three Semester Hours). A study of the application of accounting information and services in the recognition or solution of management problems in business. Prereq: ACC 201, or ACC 221 and 222 or its equivalent, and MA 123 or its equivalent.
(2) ECO 610, "Managerial Economics." (Three Semester Hours). Analysis of applications of economic theory to management decision making. Such problems as demand and cost determination, pricing, and capital budgeting are treated. Prereq: MA 123 or its equivalent.
(3) FIN 600, "Corporate Financial Policy." (Three Semester Hours). A study of financial management from the viewpoint of the corporate financial officer. Areas studied include capital budgeting, capital structure, financing decisions, working capital management, dividend policy, and mergers and acquisitions. Prereq: ECO 610, MGT 650, and ACC 628.
(4) MKT 600, "Marketing Management." (Three Semester Hours). This course is designed to provide students with an understanding of: the role of marketing function in an organization; the types of marketing decisions and analytical procedures involved in

[^10]making each decision; the overall marketing planning process; and, the impact of the social, economic, and legal environment on marketing decisions. Prereq: ECO 610, ACC 628, MGT 611, and MGT 650.

These four courses are part of the MBA curriculum, but special sections of these courses with an emphasis on health care application will be offered for students in the certificate program.

In addition, CPH 755, "Leading Change with Healthcare Teams," is highly recommended as an elective course for students in the finance and business track

## QUALITY AND SAFETY IMPROVEMENT TRACK

For students who elect the track in quality and safety improvement, two additional courses will be required. They are:
(1) CPH 755, "Leading Change with Healthcare Teams." (Three Semester Hours). This three credit hour course will focus on skill development in using teamwork to achieve leadership goals in health care delivery; identification of key features of successful teams and factors that lead to team failures; and identification of specific behaviors and communications that enhance effective team interaction.
(2) MFS 526, "Operations Management in Lean Manufacturing." (Three Semester Hours). This course employs a mixture of in-class presentations, hands-on activities, and selected outside assignments to teach and demonstrate the development of a lean operations environment and the management system to support it. Working in teams, students apply fundamental lean tools and concepts to develop a lean operations environment in a simulated factory. As the operational environment evolves, key management principles and tools are explored using the teachings of Taiichi Ohno and other considered to be the pillars of the Toyota Production System.

In addition, students will complete two (2) courses from the following list of electives or another course(s) approved as a substitute by the Certificate Director. Other courses in the College of Business and Economics, the College of Public Health, and the College of Engineering may be available as electives. Electives will be reviewed periodically as necessary by the Certificate Director in consultation with the Certificate Leadership Committee and the faculty of record. All newly approved electives will be at the 600 -level or higher.

- HA 623, "Healthcare Operations Analysis and Management." (Three Semester Hours). This course addresses the basics of operations improvement from project selection through process and outcomes evaluation. The focus is on strategic decision making under conditions of uncertainty, risk and multiple objectives, and change implementation using teams.
- CPH 710, "Healthcare Epidemiology," (Three Semester Hours). This course will focus on the epidemiology, history, methods, and ancillary laboratory tools used in the study and control of healthcare associated adverse events, including discussions of key concepts and theory, basic types of epidemiological investigations and study designs, and distinctive problems associated with specific risk factors. Adverse events will be discussed as components of patient safety and the quality of care.
- CPH 680, "Fundamentals of Healthcare Quality and Safety." (Three Semester Hours). This course introduces students to the broad discipline of health services systems with an emphasis on quality and patient safety. By the end of this course students will have a better understanding of the theory, methods, structures, and processes of health services, quality and patient safety and why these core areas are so important in health care.
- CPH 614, "Managerial Epidemiology." (Three Semester Hours). This course equips students with basic skills in the field of epidemiology and its application in the field of healthcare management. This course applies and integrates the principles and tools of epidemiology to the decision-making in a health care environment. It is intended for epidemiologists, managers, and clinical nurse executives and leaders who want to understand the value of epidemiology and population-based health care to the process of rational decision-making. The course builds upon fundamental epidemiologic principles and theory, with specific applications to health services.
- CPH 758, "Special Topics in Health Management and Policy." (Three Semester Hours). A special section of this course will teach students how to conceptualize, design, and plan consumer- and patient-oriented research studies, both from a population and clinical perspective. Students will learn how to formulate research ideas, select appropriate study design, and identify valid and reliable measures of health-related quality of life and consumer assessment of care.
- HA 624, "Information Systems in Healthcare." (Three Semester Hours). This course provides a managerial level perspective on the use of information and information systems (IS) in healthcare. The course will review basic information on IS technology,
terminology, and data management. In this course, students will apply a lifecycle approach to information systems development including systems analysis, design, development, implementation, and evaluation. Outside speakers will provide additional insights on current and evolving information system applications and information technology within healthcare. Decision analysis, strategic planning, and organization theory will be integrated and applied in course projects to address client-centric information system needs in health organizations (i.e., finance, administration, clinical applications, strategic planning, and performance management). Legal, governance, and ethical issues regarding health information will be addressed.
- MFS 609, "Leadership for a Lean System." (Three Semester Hours). This course will explore the Toyota Production System (True Lean) using guest speakers, discussion groups, simulations and various other activities. Guest speakers will include a variety of highly experienced Toyota leaders, both current and retired, as well as leaders from local organizations. Because the common focus of a True Lean enterprise is people doing work, the concepts covered in this course are applicable to all types of organizations from nonprofits, to healthcare and transactional services. Topics will include understanding the skills and behaviors needed to build and manage a True Lean system, how to develop and manage committed team members, and managing change within the organization and its effects on team members.


## C. APPLICATION EXPERIENCE

The requirements of CPH 755 will include student participation in team projects conducted at UK Healthcare and, possibly, at other healthcare organizations. In addition, while not a certificate program requirement; students in all three tracks are strongly encouraged to complete College of Engineering's non-credit Lean Systems Certification Program, an intensive one week instructional program offered by the College of Engineering several times per year. This experience would enhance their knowledge and skills and enrich their education. For students in the Finance and Business track, a non-credit, 36 contact-hour Lean Six Sigma instructional program is provided by the Gatton College of Business and Economics.

## V. BENEFITS OF THE GRADUATE CERTIFICATE IN IMPROVING HEALTHCARE VALUE

## A. FOR STUDENTS:

1. Formal certification in improving healthcare value and enhanced preparation for career advancement in healthcare and health related organizations.
2. Valuable inter-disciplinary and team leadership experience.
3. Fifteen hours of graduate credit some or all of which may be applicable to UK's MBA or MHA programs.
B. FOR THE COLLEGES:
4. Opportunity to collaborate in a high-quality, innovative graduate certificate program that accesses and employs resources from multiple colleges.
5. Promote multi-disciplinary education and team-work that fosters future collaboration and will have long-term benefits for all participants.
6. Create a cadre of US and international Certificate Program graduates who can assist in recruiting future students for the contributing Colleges.

## C. FOR THE UNIVERSITY OF KENTUCKY AND THE COMMONWEALTH

1. Provide educational experiences for current UK students and practitioners that, over time, will enhance the health and welfare of citizens in the Commonwealth of Kentucky and beyond.
2. Strengthen UK's reputation as an institution that provides high-quality education and training that addresses high-priority health issues in the Commonwealth, the nation, and the world.

## VI. APPLICATION, ADMISSION, AND COMPLETION REQUIREMENTS

A. Prospective students will apply for admission to the Graduate Certificate Program through the Graduate School on-line application process. Admission requirements will include a baccalaureate degree, GRE or ATGSB scores, and at least one course in statistics and/or quantitative methods.
B. Persons with post-baccalaureate degrees in the health professions (e.g., MD, PharmD, etc.) who wish to enroll in this Certificate Program will not be required to have GRE or ATGSB scores.
C. To assist in the admissions decision process, applicants will be asked to provide a concise (two page) statement on why he or she wishes to complete this Certificate Program and a onepage bio.
D. Applicants for admission must be approved by the Certificate Director who shall notify the Graduate School of the student's admission.
E. The number of admissions to this Graduate Certificate Program may be limited to coincide with available faculty resources.
F. This Graduate Certificate Program will require five courses (total of 15 semester hours) that ordinarily can be completed in a sequence of four academic terms. In some instances, depending on course availability and the student's course load, it may be possible to complete the requirements in three consecutive terms.
G. All course work must be completed within five years of admission to the Certificate Program. Graduate Certificate students must maintain a GPA of 3.0 or better to progress in the curriculum and receive the Certificate.
H. When an enrolled student has successfully completed the coursework, the Certificate Director will sign and send the Graduate Certificate Completion Form to the Dean of the Graduate School verifying that the student has fulfilled all requirements for the Certificate and requesting award thereof. The Graduate School shall then issue the student's certificate and officially notify the University Registrar of the awarding of the Certificate for posting to the student's permanent transcript.

## SIGNTURE ROUTING LOG

## General linformation:

Proposal Name: Graduate Certificate in Improving Healthcare Value
Proposal Contact Person Name: Andrea Perkins Phone; 218-2021 Emali: andrea,perkins@uky,edu

## INSTRUCTIONS:

Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entrys and obtain signature of person authorlzed to report approval.

Internal Colloge Aprrovals and Course Cross-Ifsting Approvals:

| Reviowlig Group | Date Approvad | Contact Person (name/phone/amail) | Slguature |
| :---: | :---: | :---: | :---: |
| Academic Affalrs Commiltee | 4/9/15 | John Watkns/218-0240/Johnwatkins@uky, edu |  |
| Facuity CoundI | 4/22/15 | Steve Fleming/218-2229/steven,fleming@uky,edu |  |
| Academlc Dean-Public Healh | 4/22/15 | Kathryn Cardarelll/218. <br> 0241/Kathryn.cardarelll@uky,edu |  |

External-to-College Approvals:

| Council | Date <br> Approved | Approval of <br> Revlsion |  |
| :--- | :--- | :--- | :--- | :--- |
| Undergraduate Council |  |  |  |
| Graduate Council | $5 / 7 / i 5$ | Noanan Nileoul |  |
| Health Care Colleges Councll |  |  |  |
| Senate Councll Approval |  |  |  |

Comments: $\qquad$
$\therefore$

[^11]
## CERTIFICATE ASSESSMENT

## Student Learning Outcomes

The learning objectives for the graduate certificate are:

- Understand the history, structure, and functions of the U.S health care system (all students)
- Understand how access, cost, and quality of health services in the U.S compares with other nations and explain the need for improvements (all students)
- Enhance knowledge and skills in assessing organizational effectiveness and managing change processes (all students)
- Enhance proficiency in planning, organizing, and leading multi-disciplinary clinical teams (especially students in the clinical leadership track)
- Enhance proficiency in applying fundamental accounting, economic, financial, and marketing principles and tools in healthcare settings (especially students in the finance and business track)
- Enhance proficiency in identifying opportunities for improving patient care quality and safety and applying contemporary principles and tools in achieving better outcomes (especially students in the quality and safety improvement track)"


## Student Learning Outcome Assessment

Our plan is to develop and integrate assessment instruments throughout the required courses to provide students with continuing feedback and to provide faculty with metrics based on student comprehension. The intent is to modify course content as appropriate and to improve the Graduate Certificate content as needed. For example, we will request that a course instructor develop appropriate artifacts that can be integrated into the assessment plan as students enroll in the Certificate and as the program matures. Such artifacts include, but are not limited to examinations, project reports, integrative papers, reviews of books read, etc.

As a part of all three tracks, CPH 600 (Health Services and Systems Organization) will provide the core knowledge of the U. S. healtheare system on which the other four courses in each track will build. The Clinical Leadership track and the Quality and Safety Improvement track expand on the knowledge gained in CPH 600 and CPH 755 (Healthcare Team Leadership in Changing Times). The Business and Finance track will build on the core knowledge of CPH 600 throughout the four required courses developing an understanding of the business and finance aspects of healthcare.

## Certificate Outcome Assessment

In addition to specific evaluation built into each course, we also will develop an overall Certificate assessment methodology. This will be developed based on the learning objectives for the Certificate as stated above. The specific means of measuring these objectives will be determined during the first two years following the approval of the Certificate and prior to its completion by the first cohort of students. The Certificate leadership team will be charged with developing the metrics to be assessed. Our plan is to develop two core deliverables for Certificate assessment: (1) quantitative data for selected assignments in courses that reflect the

Certificate learning objectives; and (2) artifact collection from courses, such as project reports, integrative papers, book review and/or final projects that will reflect certificate learning objectives. As an example, the learning objective based on CPH 600 will be assessed by the final examination based on a metric of the percentage of students scoring $80 \%$ or better. Both deliverables will be developed by the Certificate leadership team. In addition, the Certificate will be assessed by determining the percentage of each cohort completing the five course sequence in the selected track with a metric based on an $80 \%$ completion rate.

Application of the certificate learning objectives will be assessed by two methods: (1) Since students in all three tracks are encouraged to complete the College of Engineering's noncredit Lean Systems Certification Program as an opportunity to apply what has been learned in the Certificate, a metric of $50 \%$ completion will be established. (2) Assess the career outcomes of those completing the Certificate through contact with the Certificate alumni utilizing online social network systems (e.g., LinkedIn, Twitter) and the alumni relations staff of the three Colleges. Formal and informal alumni surveys of their current career and salaries; the connections between courses and subsequent work tasks; and input on additions or changes to the course material will be conducted for each track cohort.

## DEANS' LETTERS

UNIVERSITY
OF KENTUCKY

April 15, 2015

Faculty Council
College of Public Health
University of Kentucky

## RE: Support for Graduate Certificate in Improving Healthcare Value

I write this letter to indicate my unqualified and enthusiastic support for the proposed Graduate Certificate in Improving Healthcare Value. After reviewing the proposal carefully, I am excited to collaborate with the Gatton College of Business and Economics and the College of Engineering in providing this certificate.

This is a truly an innovative approach to graduate education and I will believe will be an immense success in training future leaders in healthcare.

Sincerely,


Wayne T. Sanderson, $\mathrm{PhD}, \mathrm{CIH}$ Interim Dean


COLE GE OF bUSHES \& ECOnOMICS UNIVERSITY OF KENTUCKY

April 15, 2015

Faculty Council
College of Public Health
University of Kentucky

RE: $\quad$ Support for the Graduate Certificate in Improving Healthcare Value

Dear Members of the College of Public Health Faculty Council:

I write this letter to indicate my unqualified and enthusiastic support for the proposed Graduate Certificate in Improving Healthcare Value. I have reviewed the proposal in detail and have met to discuss it with interim Dean Wayne Sanderson of the College of Public Health, Dean John Walk of the College of Engineering, Dr, Larry Prybil, Dr. Jim Holsinger, and Dr. Ty Borders, all from the College of Public Health, and Dr. Joe Lablanca from the Gatton College of Business and Economics.

I am truly excited to collaborate with the College of Public Health and the College Engineering on a certificate program that will serve students in the MBA, MPH, and MHA programs, but that will also provide an opportunity for industry professionals to build a skill set that is in high demand in the healthcare industry.

Our college is prepared to deliver the business courses included in the certificate. The proposal has been approved by our MBA Policy Committee and will be part of the agenda at our April 24, 2015 faculty meeting, where it will be presented for review and approval.

Sincerely,


David W. Blackwell
Dean

Office of the Dean
College of Entgincertug
351 Ralph G. Anderson Building
Lexington, KY 40506-0503
\$59257-1687
Tax 859 257-5727
www.engr.thy.edu

April 10, 2015

CPH Faculty Council
University of Kentucky
College of Public Health

## Dear Council Members,

I write to express my strong support for the proposed graduate certificate in Improving Health Care Value. The College of Engineering is excited about the opportunity to participate in this valuable program and will commit to offering the courses relevant engineering courses, specifically in the Quality and Safety Improvement track.

Sincerely,


John Y. Walk
Dean

## see blue.

An Equal Opportunity University

## COLLEGE OF PUBLIC HEALTH APPROVAL

## HMP FACULTY MEETING MINUTES

November 12, 2014
1:00-2:30 CPH 207
Attendees: Ty Borders, Martha Riddell, Julia Costich, Mike Smith, F. Douglas Scutchfield, Sarah Wackerbarth, Rick Ingram, Jim Holsinger, Larry Prybil, CB Mamaril, Scott Hankins, Kimberly Tumlin, Andrea Perkins, and Melody Hall

1. Approve September faculty meeting minutes

- Approved

2. Update on electronic student course evaluations (Andrea Perkins, Kimberly Tumlin)

- Kimberly Tumlin will work with assessment and with the colleges' stakeholders.
- TCE's on-line will be on a trial run basis this Fall.
- Fall 2015 they will be available college wide in Fall 2015.

3. Update on faculty recruitment

- We are interviewing Adam Wilk in December.
- We will interview others later.

4. Drs. Holsinger and Prybil presented the proposed certificate in Improving Health Care Value. The faculty discussed the certificate.

- The 3 tracks of the certificate are Clinical Leadership, Finance and Business, and Quality /Safety Improvement.
- Overall, the faculty expressed some support for a potential certificate, but had concerns about particular components of it.
- Several faculty members questioned what the target audience was for the certificate and the business case for offering it.
- There was discussion that the certificate is not a partnership with B\&E because the Finance and Business track does not include any HMP courses.
- Several faculty members commented that we should cross-list selected HMP and B\&E courses in the Finance and Business track (e.g., health care marketing and marketing).
- Several faculty members commented that CPH 600 Health Services and Systems Organization should be the core/foundational course.
- There were some questions raised about the "electives" language contained in the certificate proposal- would they be in addition to or in place of the "selectives" listed?
- Several questions were raised regarding the practicum, noting that it is for no credit hours and would generate no tuition revenue.

Dr. Borders summarized the main points regarding the certificate for further discussion:
(1) Business case and market
(2) Core/foundational course
(3) Health care content in the Finance and Business track
(4) Need for a practicum
(5) Assessment/competencies
5. Discussion about combined HA/CPH course content
6. Brief CPH Committee Reports
a. Faculty Council -Riddell
b. Academic Affairs - Wackerbarth

- We have 18 students that have completed their course work but have not completed their capstone.
- Steve Fleming will have a new Healthcare Epi. course. Dr. Wackerbarth will send it to the HMP faculty.
c. Admissions - nothing to report
d. Research - nothing to report
e. Practice and Service - nothing to report
f. Health Care Colleges Council - nothing to report
g. Academic Promotion and Tenure - nothing to report

7. Other issues

- Dr. Williams stated that his new course proposal is based on prior courses taught be Sarah Wackerbarth. This course will engage faculty and staff that are interested in health care teamwork.
- This course will teach how to become a leader, trainer, for our future workers.
- Also, the electronic format will be interactive.

8. Adjourn

| From: | Prybil, Larry |
| :--- | :--- |
| Sent: | Saturday, April 11, 2015 2:07 PM |
| To: | Holsinger, James |
| Subject: | SOME GRADUATE CERTIFICATE-RELATED ITEMS WE'LL WANT TO ADDRESS |

Jim - In addition to talking with Steve Fleming and developing any additional "section(s)" to the current proposal we decide are needed for the CPH Faculty Council's review, there a few related items we should discuss:

- With request to the "approval date" by the HMP faculty, there a couple of options. Probably the best bet is to use 2/25/15. On February 17 I sent Ty (and you) an email that appended the draft proposal dated $2 / 17 / 15$. That email outlined - and the proposal incorporated - the two (minor) amendments the HMP faculty agreed upon in December plus the edits that emerged from our $1 / 13 / 15$ team meeting with the B\&E folks + Brian Jackson's suggestions and asked Ty if he wanted to place this package on the $2 / 25 / 15$ HMP faculty agenda. His preference was to distribute my email \& the proposal to the faculty with a transmittal note from him that saying "Please see below an update on the status of the proposed certificate program. We have a full agenda of other issues set for tomorrow's meeting, but this email should suffice." At that meeting, under Other Business, I asked if anyone had questions -- no one did -- and outlined the next steps and timetable to obtain multi-college \& UK approvals.


# Academic Affairs Committee Meeting <br> Minutes <br> April 9, 2015 <br> 9:00am <br> CPH, Room 115 

Attendees: Keith Branham (DrPH Student), Sabrina Brown (Epidemiology), Julia Costich (Health Management \& Policy), Kate Eddens (Health Behavior), Sujin Kim (Biostatistics), Andrea Perkins (Academic Affairs Administrator), Kimberly Tumlin (Assistant Dean Academic \& Faculty Affairs), John Watkins (Gerontology, chair)

Absent: Katherine Cardarelli (Associate Dean Academic \& Student Affairs), Stephen Carrick (MHA Student), Betty Ouyang (Environmental Health)

1. Call to Order by Dr. Watkins at 9:03am
2. Approval of Agenda - Motion was made to approve by Julia Costich with a second from Kate Eddens. Agenda was approved.
3. Approval of Minutes from March $12^{\text {th }}, 2015$ meeting - Motion was made to approve by Julia Costich with a second from Sujin Kim. Minutes were approved.
4. Curricular proposals:
a. Course Change Proposal: BST 330 - Change to BST 230 - Dr. Watkins Primary Reviewer
i. Changes are being proposed to compliment BPH program. The suggested change is to a lower number and change the title. The committee recommends changing the title to Public Health Analytics I for BST 230.
ii. The course proposal form lists a discussion section but in the syllabus it is listed as a lab. The committee recommends that the instructor be consistent.
b. New Course Proposal: CPH 330 Public Health Analytics - Dr. Watkins Primary Reviewer
i. The committee recommends changing the title to Public Health Analytics II to compliment the title of BST 230 since this is to be a follow up course and BST 230 would be a prerequisite.

The chair recommended to approve both course proposals pending the recommended changes - the courses were approved.
c. New Certificate Proposal: Improving Healthcare Value - Dr. Watkins Primary Reviewer
i. The certificate allows for flexibility within the curriculum for students to choose one of three tracks. The certificate is coordinated with CPH, B\&E, and Engineering.
ii. The committee questions how often the courses in the proposal are being offered.
iii. Dr. Costich said the finance and engineering courses are part of their regular programs and are offered frequently. The HA courses are offered every year in the MHA program. She's not sure about CPH 710.
iv. Dr. Watkins recommended that Dr. Holsinger and Prybil add an appendix that shows the course offerings/frequency and the resources that will be available for a student to complete the certificate in a timely manner.
v. Dr. Tumlin suggested outcomes be listed for the program and an assessment plan be created as well.
vi. The committee recommends the following amendments so that the certificate can continue on through the committees unencumbered:

1. Include course and instructor overview and plan
2. Obtain letters of support from all three College Deans
3. Include an assessment plan
4. The date the HMP department approved the certificate needs to be included for Senate
vii. A motion to approve the certificate with recommendations was made by Kate Eddens with a second from Kimberly Tumlin. The certificate was approved pending recommendations.
5. Report of Associate Dean for Academic Affairs - given by Kimberly Tumlin
a. To follow up from previous meetings: The TA policy was revised - 1. Open enrollment window with specific days was added, 2. TA's will need to self-register for orientation, 3 . Time frames have been adjusted to allow more time for processing. The process will be posted online on the HR webpage
b. Dr. Watkins asked if the teaching practicum and seminar courses be utilized for TA training. Dr. Tumlin reported that the teaching courses will not tie into the TA process at the moment.
c. The Capstone and Practice courses for the BPH program need to be offered; they are both being offered this fall.
d. The minor is in the planning process - it started through the system, but was pulled since there were changes in development to the proposal.
e. The major changes will be coming to the table shortly and will address sequencing, outcomes and progression. The new curriculum design will address prerequisite needs for higher level courses
f. The assessment planning will enhance tracking in the core courses to ensure skills are being developed.
g. There is a new advising planning tool being developed, so all undergrad programs had to develop their course sequencing as a tool for the new software the University is rolling out this fall.
h. The College is working on strengthening the BPH to align students in pursuing an MPH or other Master's level programs or enter the workforce.
i. This involves restructuring the BPH so the electives would allow students to receive a minor as well either within the College or other Colleges.
j. A course sequencing map at the College level needs to be developed to prevent course time conflicts.
k. Update on BPH enrollments for the fall: at the end of March we are at 52 pre and BPH majors. The projection is to have 150 students by January. We will have our first graduates in December.
I. KHP has a proposal that is a BS in Health Promotion (non-teaching certified track) which includes a new course proposal that is very similar to CPH 201. Dr. Tumlin and Cardarelli are meeting in May with KHP to discuss how we can collaborate without having crossover.
m . The Provost has asked all the Colleges to prepare a report as an overview of the health of the College. The report will look at what resources are necessary for implementation of College programs.
6. New/Future business
a. Dr. Watkins asked if more special topics lines can be created, specifically at the 500 -level in the BPH
b. Dr. Watkins asked for an advising FAQ for undergrad instructors.
7. Next Meeting: May 14, 2015
8. Adjournment

# UK <br> UNJV1FSSTYO! KENTUCKY* <br> College of Public Health <br> Academic Affairs Committee Meeting Minutes <br> April 9, 2015 <br> 9:00am <br> CPH, Room 115 

Attendees: Keith Branham (DrPH Student), Sabrina Brown (Epidemiology), Julia Costich (Health Management \& Policy), Kate Eddens (Health Behavior), Sujin Kim (Biostatistics), Andrea Perkins (Academic Affairs Administrator), Kimberly Tumlin (Assistant Dean Academic \& Faculty Affairs), John Watkins (Gerontology, chair)

Absent: Katherine Cardarelli (Associate Dean Academic \& Student Affairs), Stephen Carrick (MHA Student), Betty Ouyang (Environmental Health)

1. Call to Order by Dr. Watkins at 9:03am
2. Approval of Agenda - Motion was made to approve by Julia Costich with a second from Kate Eddens. Agenda was approved.
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The chair recommended to approve both course proposals pending the recommended changes - the courses were approved.
c. New Certificate Proposal: Improving Healthcare Value - Dr. Watkins Primary Reviewer

College of Public Health

$h$. The College is working on strengthening the BPH to align students in pursuing an MPH or other Master's level programs or enter the workforce.
I. This involves restructuring the BPH so the electives would allow students to receive a minor as well either within the College or other Colleges.
J. A course sequencing map at the College level needs to be developed to prevent course time conflicts.
k. Update on BPH enrollments for the fall: at the end of March we are at 52 pre and BPH majors. The projection is to have 150 students by January. We will have our first graduates in December.
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a. Dr. Watkins asked if more special topics lines can be created, specifically at the 500 -level in the BPH
b. Dr. Watkins asked for an advising FAQ for undergrad instructors.
7. Next Meeting: May 14, 2015
8. Adjournment

# University of Kentucky College of Public Health Faculty Council Minutes <br> Wednesday, April 22, 2016 <br> 8:30 am <br> CPH Room 207 

Attendees: Fleming, Prince, Riddell, Sanderson, Swanson, Watkins, Flanagan
I. Call to Order - The meeting was called to order at 8:35 am.
II. Approval of Agenda - The agenda was accepted as presented.
III. Approval of minutes - The minutes from March 25, 2015, were accepted as presented.
IV. Dean's Update - Sanderson provided information as follows:

- Dean's Search - four dean candidates have been invited to campus the first week of May to meet with college constituents, give talks, and meet with external partners. It is anticipated that there will be a second interview with one or two candidates.
- The number one priority when Sanderson became interim dean was to realign activities in the business office. While there has been great progress, there is still work to be done. The college will finish "in the black" this fiscal year. The college audit has been put on hold.
- The Provost's budget meeting is on Friday April 24. The plan is to request more resources, including 3 new regular faculty lines, lecturer faculty support, and TA support. Flanagan provided an overview of the Lecturer title series and will distribute the university AR to the committee. Watkins can provide several recent articles regarding the utilization of lecturers. Space issues will again be highlighted.
- Development-Sarah Noble has been working to identify and track scholarships and endowments. She is working with Scot McIntosh to develop two annual alumni newsletters. The new dean should have the experience to solicit large donations for the college.
V. Unfinished Business
- HCCC election - One faculty member has self-nominated for this position. Fleming will continue to solicit nominations, with a possible vote being held at the all-hands meeting.
- College Committees for 2015-16 - The college committee roster was reviewed again, sharing feedback from chairs about representatives from departments. Our goal is to have a complete roster before July 1.
VI. New Business
- The following curricular items were approved:
- New course proposal: CPH 330 Health Analytics I
- Course change proposal: BST 330 Title Change
- New Graduate Certificate Proposal: Improving Health Care Value The council requested that Academic Affairs conduct an assessment of the value of cerifificates to graduates in obtaining positions.
- The All-Hands meeting agenda was reviewed. Fleming will work to finalize it and send to faculty and staff in a few days.
VII. Committee Reports - none.
VIII. Other Business

There was a brief discussion regarding questions for the dean candidates.
IX. Closing

- Action Items
- Fleming will continue solicit nominees for the HCCC electlon.
- Flanagan will distribute the AR regarding the Lecturer title series, as well as articles from Watkins.
- Fleming will continue filling the College Committee roster with department representatives for the 2015-16 academic year.
- Agenda Items
- Next Meetíng
- The next meeting is scheduled for Wednesday, May 27, 8:30 am in CPH 207.
X. Adjourn - The meeting was adjourned at 10:01 am.

Minutes prepared by Becki Flanagan

# Bylaws of the <br> University of Kentucky College of Public Health 

## PREAMBLE

These Bylaws serve to govern and guide the academic and administrative conduct within the College of Public Health. They are intended to be consistent with the Governing Regulations and Administrative Regulations of the University of Kentucky and the laws of the Commonwealth of Kentucky and the United States of America. In the event the Bylaws presented herein are inconsistent or contrary to the above-mentioned regulations and laws then those regulations and laws supersede these Bylaws.

### 0.0. ACADEMIC STRUCTURE

0.1. The College is comprised of personnel who, as a group, provide purpose for the College and are responsible for conduct in support of the many mandated and elective activities found within the College.
0.1.a. The Faculty is primarily responsible for the research, teaching, and service missions of the college, and collectively serves as the governing body of the College.
0.1.b. The Administration is primarily responsible for managing the fiscal affairs of the College, and for instituting academic policies and procedures, as developed and/or modified by the Faculty, in accordance with university, state, and accrediting bodies.
0.1.c. The Staff is primarily responsible for providing Faculty and Administration the support necessary in fulfilling the mission of the College.
$0.1 . \mathrm{d}$. The Students are responsible for engaging in the opportunities for academic and professional achievement provided by the College.
0.2. The College is comprised of six Academic Units: the Departments of Biostatistics, Epidemiology, Health Behavior, Health Services Management, Preventive Medicine and Environmental Health, and the Graduate Center for Gerontology.
0.2.a. A department is the basic educational unit within the College for instruction, research, service, practice and extension in a defined field of learning.
0.2.b. The Departments shall have responsibility to the College as their primary mission.

## 6.2.a. Faculty Council Responsibilities

6.2.a.(1). Serve as the representative voice of College faculty.
6.2.a.(2). Provide, with support of standing committees, the means whereby College faculty exercise governance.
6.2.a.(3). Foster communication among all faculty, administrators, staff, and students for purposes of effective governance.
6.2.a.(4). Develop and provide mechanisms to effectively inform and engage faculty in matters of governance.
6.2.a.(5). Establish, interpret, and enforce the College By-laws, and provide mechanisms for change of By-laws.
6.2.a.(6). Interpret and evaluate the Rules and Procedures of the College for conformance with faculty governance, and recommend to the faculty any modifications thereof.
6.2.a.(7). Act as liaison with College departments and with other University entities as appropriate to the roles and responsibilities of the Faculty Council.
6.2.a.(8). Report to the Dean those matters requiring administrative action.
6.2.a.(9). Recommend on behalf of the faculty any matters that warrant attention of the Dean of the College, the Provost, the President of the University, or the University Senate.
6.2.a.(10). Recommend members for the Appointment, Promotion, and Tenure Committee for subsequent approval by the Dean.
6.2.a.(11). Recommend appointments to standing committees.
6.2.a.(12). Confirm the Chair-Elect for each standing committee for the next fiscal year based on recommendations from the respective committees.
6.2.a.(13). Inform faculty of all committee appointments.
6.2.a.(14). Charge faculty standing committees, as necessary, with matters for study and recommendations.
6.2.a.(15). Oversee standing committees to facilitate faculity business.
6.2.a.(16). Facilitate all College-wide faculty elections.
6.2.a.(17). Receive, review, and recommend for faculty approval all requests for voting and nonvoting membership in the College Faculty.
6.2.a.(18). Perform other responsibilities as delegated to it by the faculty or recommended to it by the Dean.
6.2.b. Faculty Council Membership
6.2.b.(1). Faculty Council is comprised of voting faculty representing each of the College departments.
6.2.b.(2). Council representatives shall serve two-year terms.
7.5.b.(5). The Dean shall be an ex officio, nonvoting member.
7.5.b.(6). Appropriate Associate and Assistant Deans shall be ex officio, voting members. Additional Directors from the college may be non-voting members.
7.5.b.(7). Shall submit a copy of the minutes of all meetings in a timely manner to the Chair of the Faculty Council, Dean, and to the central file in the college administrative offices.
7.5.b.(8). The Chair shall maintain a record of attendance at meetings.
7.5.b.(9). Shall submit an annual report to the Dean, the Faculty Council, and to the central file.
7.5.b.(10). Shall perform other responsibilities as delegated to it by the faculty, Faculty Council, or Dean.

### 8.0. SUSPENSION OF BYLAWS

A specific bylaw may be suspended by a vote of three-fourths of the eligible voting faculty member present at a meeting of the College of Public Health faculty when the quorum is present. A suspension motion must include a rationale and an expiration date.

### 9.0. REVIEW AND AMENDMENT

9.1. The Bylaws of the faculty of the College of Public Health may be amended at any regular or special meeting of the College faculty provided at least fourteen days have elapsed between circulation to the faculty of the proposed amendment(s) and final consideration of passage.
9.2. Revisions to the Bylaws must be approved by two-thirds of the voting faculty not on leave.
9.3. Revisions to the Bylaws shall become effective upon approval of the Provost.

Amended: August 2005
Amended: August 2006
Amended: April 2008
Amended: April 2010
Revised: December 2013

GATTON COLLEGE OF BUSINESS APPROVAL

# Spring Faculty Meeting <br> Gatton College of Business and Economics Friday, April 24, 2015 

Felipe Benguria, Brian Bratten, Monika Causholli, Paul Childs, Anthony Creane, Tereza Dean, Josh Ederington, Scott Ellis, Wally Ferrier, John Garen, Bob Gillette, Dan Halgin, Ana Herrera, Gordon Holbein, Gail Hoyt, Zhi Huang, David Hulse, Cynthia Miller, Rose Kim, Carlos Lamarche, Anita Lee-Post, Mark Liu, Wendy Liu, Lala Ma, Tom Pope, Frank Scott, Steve Skinner, Scott Soltis, Sudharshan, Jane Wells, Dave Ziebart, Jim Zillak

Approval of minutes from December $12^{\text {th }}$ meeting - all approved

## The Graduate Certificate in Health Care - Dr. Steve Skinner

An email has circulated with details of the proposal for the Graduate Certificate in Health Care. Dr. Joe Labianca has worked on it this and we received the MBA policy committee approval. I'd like to get a vote and move ahead.

Dr. Jim Ziliak - why healthcare certificate and not administration

- Harvie was approached three years ago and was interested in more MBA's getting that degree but focused on healthcare.
- Nationwide this is not uncommon. Demand and interest was there.

Dr. Wally Ferrier - graduate certificate open to others in the university

- Yes, might go more health degree, or other. It will count towards MBA degree

Dr. Joe Labianca - just make sure you understand this is modular. They will use this to move onto a master's degree. It is flexible.

No further discuss, all in favor - no opposed

## LETTERS OF SUPPORT

## Faculty of Record

December 18, 2015
I strongly support the Graduate Certificate in Improving Healthcare Quality and will serve as a member of the faculty of Record,

Jim Holsinger

December 19, 2015
Jim,
I strongly support the Graduate Certificate in Improving Healthcare Quality and am happy to serve as a member of the Faculty of Record.

Let me know if you need anything else.
Steve Skinner

January 4, 2016
Dr. Holsinger,
I am happy to accept a role on the Faculty of Record for the Graduate Certificate in Improving Healthcare Quality.

Thank you for providing me the opportunity to participate in such an important certificate program. I look forward to the launch of the certificate.

Sincerely, SW
Sarah Wackerbarth, Ph.D.
Associate Professor, Health Management \& Policy
MPH Concentration Advisor, Population Health Policy \& Management

January 14, 2016
HI James,
I have been home recovering from surgery and this slipped through the cracks. I would be happy to serve as a faculty of record for the COE/Lean Systems Program.

Abbot Maginnis

December 23, 2015

Dear Members of the University Senate:
It is my privilege and pleasure to serve as Faculty of Record for the new Graduate Certificate in Improving Healthcare Value. This is an innovative program born of a great and willing collaboration between the University of Kentucky's College of Public Health and the Gatton College of Business and Economics, with assistance from the College of Engineering. The faculty members from all colleges are excited to see this certificate come into being because we all believe that as the healthoare industry is undergoing radical transformation, there will be great need for additional educational opportunities for those attempting to lead the required changes to their organizations. Our faculty have voted overwhelmingly in favor of this certificate multiple times and are prepared to support it.

I look forward to serving with my colleagues from around the university on this interdisciplinary certificate's Faculty of Record. I know that we are all looking forward to the certificate becoming a reality. Thank you for your assistance in reviewing this program.

Sincerely,


Giuseppe (Joe) Labianca
Gatton Chair in Management
Department of Management
Co-Director, LINKS Center for Social Network Analysis
Co-Director, University of Kentucky/University of Louisville Executive MBA
Concentitation
Dilrector, Don and Cathy Jacobs Executive Education Center
Gatton College of Business \& Economics
University of Kenticky
Lexington, KY 40506-0034 .

UNITEAIIY OF XENTECKY

October 12, 2015

TO: Joe LaBianca<br>Director, Don \& Cathy Jacobs Executive Education Center

FR: Brad Jordan P. JM-
Chair, Department of Finance and Quantitative Methods (FAQM)
RE: Graduate Healthcare Certificate Program
In my role as department chair, I've reviewed the Graduate Healthare Certificate Program and agree that it will serve an important role in extending improved education among healthcare professionals. My department is willing to offer and staff a special section of FIN 600 that is healthcare focused in support of this newv certificate program.

Joe Lablanca [Joolablanca@gmall.com](mailto:Joolablanca@gmall.com)

## Graduate Healthcare Certificate Letter

Hoyt, William [whoyt@uky.edu](mailto:whoyt@uky.edu)
Mon, Oct 12, 2015 at 2:20 PM
To: "Lablanca, Joe" [joe.labianca@uky.edu](mailto:joe.labianca@uky.edu)



Dear Joe,

As department chair, I have reviewed the Graduate Healthcare Cerlificate Program and agree that it will serve an Imporlant role in extending improved professlonal education among healthcare professionals. My depariment is willing and able to offer a special section of ECO 610 focused on heallhcare in support of this new certificate program.

BIII

## William Hoyt

Chalr and Gatton Endowed Professor
Department of Economics
Gatton College of Business and Economics
University of Kentucky
Lexington, KY 40502
whoyt@uky.edu
859-257-2518

Joo Lablanca [joelablanca@gmall.com](mailto:joelablanca@gmall.com)
byong

## Graduate Healthcare Certificate Letter Request

Hardesty, David M <dmhard3@email.uky,edu>
Tue, Oct 13, 2015 at 2:40 PM
To: "Lablanca, Joe" [joe.lablanca@uky.edu](mailto:joe.lablanca@uky.edu)
Hello Joe,

In my role as department chair, l've reviewed the Graduate Healthcare Cerlificate Program and agree that it will serve an important role in extending Improved professional education among healthcare professionals. My department is willing to offer and staff a special section of MKT 600 that is heallhcare focused in support of this new certificate program.

## David

## David Hardesty

Carol Martin Gatton Endowed Chair
Department Chair Marketing and Supply Chain
Director of the Von Allmen Behavioral Lab
University of Kentucky
david.hardesty@uky.edu

October 20, 2015

Department of Management 334 Galton Business and Economics Building Lexington, $K$ ' 40506.0034 (859) 619.9819<br>Fax: (859) 257-3577<br>hltp://gallon.ukyechu

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In my role as Chair of the Deparment of Management, J've reviewed the Graduate Healthcare Certificate Program and agree that it will serve an important role in extending improved professional education among healthcare professionals. My depariment recognizes that if students choose to go on for their MBA degrees, they will likely opt out of the Global Management course to take the Healthcare Leadership course. We endorse this based on the more-local needs of the students likely to curoll in this certificate program.

Sincerely,


Daniel J. Brass
J. Heming Hilliard Professor of Imovation Management

Director, LINKS Center for Social Network Analysis
Chair, Department of Management
University of Kentucky
Lexington, KY 40506
dbrass@uky.edu
http://linkscenter:org
859-257-4260

October 20, 2015

Dean David Blackwell
Gatton College of Business and Economics
Dear Dave,
In my role as director of the Von Allmen School, I've reviewed the Graduate Healthcare Certificate Program and agree that it will serve an important role in extending improved professional education among healthcare professionals. My department is willing to offer and staff a section of ACC 628 "Financial/Managerial Accounting" (to be cross listed with existing courses HA 635 and CPH 655) that is healthcare focused in support of this new certificate program.

## Sincerely,



Urton Anderson
Director and EY Professor of Accounting Von Allmen School of Accountancy

From:
Sent:
To:
Subject:

Renfro, Michael
Thursday, January 14, 2016 6:45 PM
Holsinger, James
RE: A Question

Jim,
We are in the process of changing the course number from 609 to 509 . I don't think this is through the system yet and we will continue to offer the course as 609 until it is changed. Can you list it as either MFS 609 or 509 ?

I approve listing MFS 526 and either or both of MFS 509 and MFS 609 for the Graduate Certificate in Improving Healthcare Value.

Mike

From: Holsinger, James
Sent: Thursday, January 14, 2016 3:12 PM
To: Renfro, Michael <michael.renfro@uky,edu>
Subject: A Question

Hey Mike: I have received additional Information from the Senate Council on the Graduate Certificate in Improving Healthcare Quality. They have asked If there is a misprint in your emall of September 30, 2015, approving the use of MFS 526 and 509. In the Document we have it listed as MFS 609. Please let me know the correct course number. I think I remember that the course number was being changed and if this has already bee $n$ approved, $I$ can change it in our document. If MFS 609 is correct, please send me a new email approving listing MFS 526 and MFS 609 for the Graduate Certificate in Improving Healthcare Value. Thanks a bunch! Jim

James W. Holsinger Jr., MD, PhD
Wethington Endowed Chair in the Health Sciences
Director of Global Health Tralning and Research
College of Public Health
111 Washington Avenue, Sulte 107
Lexington, Kentucky 40536-0003
859-218-2041 (O)
859-257-2821 (FAX)
jwh@uky.edu

## Executive Summary Revised 2/28/16

## UK College of Engineering

## First-Year Engineering Curriculum and Course Change Proposal

The nine Bachelor of Science degree programs in the UK College of Engineering propose a First-Year Engineering curriculum to increase retention through hands-on laboratory courses, improve preparation for discipline specific coursework and recruit students as undeclared engineering students while they make an informed decision about the degree program best suited to their interests and career goals. Elements of the proposal include:

- Rationale for the First-Year Engineering curriculum
- Three new First-Year courses
- EGR 101 Engineering Exploration I (1 credit)
- EGR 102 Fundamentals of Engineering Computing (2 credits)
- EGR 103 Engineering Exploration II (2 credits)
- One new introductory course for transfer students
- EGR 112 Engineering Exploration for Transfer Students (1 credit)
- UK Core Arts \& Creativity request
- Structure, oversight and assessment of the First-Year Engineering curriculum
- Curriculum Change Forms
- All nine degree programs incorporating the new EGR courses
- Additional curriculum revisions in some degree programs
- Updated Engineering Standing criteria
- Acknowledgment by departments whose courses will be dropped or added
- New course and course change applications in eCats


## Rationale:

First-Year Engineering (FYE) curricula representing multiple engineering disciplines are several decades old and range from a single seminar course to sequences of courses differentiated for pre-calculus to honors students. High school students who are unsure of which type of engineering is most appealing are drawn to schools with broader freshman year experiences with the opportunity to delay the selection of a major. In addition, exposing first year students to hands-on engineering experiences while they are taking their math, chemistry and physics classes not only develops engineering skills early on but increases retention and graduation rates by keeping the students actively engaged in the engineering disciplines. Within the Southeastern Conference engineering schools, five institutions offer FYE courses and none are as comprehensive as the proposed UK FYE content. For example, Vanderbilt University students choose three five-week modules and an optional seminar rather than exposure to all degree programs. University of Tennessee offers Engineering Fundamentals courses which focus on Physics for Engineers for calculus ready students. Texas A\&M, University of Alabama and University of Arkansas FYE opportunities are fewer credit hours when compared to the UK COE curricula with some disciplinary specific coursework. Engineering schools that have adopted a FYE curriculum have reported improved retention and graduation rates. For example, the University of Tennessee demonstrated an increase in $1^{\text {st }}$ year retention from $60 \%$ to $80 \%$ and an increase in 6-year graduation rate from $40.5 \%$ to $46.6 \%$. Their 6-year graduation rate for females showed a dramatic increase from $39.7 \%$ to $51.6 \%$.

Ohio State also adopted a similar curricula and reported an increase in 6-year graduation rate from 37\% to $60 \%$ and a first year retention rate of $80 \%$. Tennessee also reported that the grades obtained by their students in higher-level courses increased after adopting the FYE curriculum.

The College of Engineering is proposing a FYE curriculum where all incoming freshmen engineering students will be admitted as an undeclared engineering student and will change to the pre-major of their choice during the spring registration cycle for their $2^{\text {nd }}$ year classes. No additional admission criteria or enrollment limits will prevent students from declaring a major. Each program already has Engineering Standing criteria in place to ensure students are making satisfactory progress toward their degree. All students will be required to complete three Engineering courses EGR 101, 102, 103 during the first year while completing CIS/WRD, science and math classes.

Transfer students will be admitted directly to a pre-major program and enrolled in EGR 112 with other transfer students rather than EGR 101. Both 101 and 112 emphasize study skills and university resources available to help them become successful engineering students. Specific technical skills covered in EGR 101 as modules will also be used in EGR 112, however, transfer students will only need to complete the modules that fill gaps from their previous coursework. Students will not be allowed to earn credit for both EGR 112 and 101 (one or the other). If a student has AP credit or transfer credit for the programming language taught in EGR 102, they will not need to take EGR 102. We do expect everyone to take EGR 103 for the teamwork and design process experience. Transfer students will not be prevented from going forward with coursework in their major and can take the EGR courses simultaneously.

The College of Engineering section of the UK Bulletin has some inconsistencies in the way in which each degree program has presented its Pre-Major Requirements, Major Requirements and criteria for Engineering Standing. Entries in the Curriculum Change forms reflect the current information as it appears in the Bulletin, however, we would like to present a more consistent set of descriptions going forward. For example, the Pre-Major Requirements will now be the courses listed in the first three semesters of each degree program. Engineering Standing criteria are determined by the faculty in each program and calculated based on a subset of the Pre-Major courses in that program. The Major Requirements are now the required courses in semesters four through eight. As a result of these clarifications, it will be much easier for prospective students to compare and contrast their options as part of their decision to choose the UK College of Engineering and subsequently choose their major at the end of the First-Year experience.

## EGR Courses:

## EGR 101 Engineering Exploration I

$$
1 \text { credit } \quad \text { Lecture } \quad \text { Major Revision } \quad \text { Arts \& Creativity }
$$

Course Description: Engineering Exploration I introduces students to the creativity inherent in how engineers and computer scientists approach innovation, design and problem solving from blue sky brainstorming to implementing a solution. Students will work in teams, practice with tools of the trade (modeling, analysis and visualization), provide peer reviews and discuss ethical implications of creative endeavors. This class is also a process of personal discovery where students explore a variety of traditional and non-traditional study and learning methods, reflect on the results of using different
methods and determine what work best for their individual learning styles and personality type. The final individual artifact is a Create Your Future project describing the student's exploration of their own talents and aptitudes, discovery process for identifying a specific discipline and a visual presentation of their career goals. Open to students enrolled in the College of Engineering.

Prerequisites: Enrolled in the College of Engineering or MA ACT of at least 23 or equivalent.

## EGR 102 Fundamentals of Engineering Computing

2 credits Lecture and Lab New course
Course Description: Fundamentals of Engineering Computing introduces students to the practice and principles of computer programming and computational problem solving. Students will engage in hands-on project-based problem solving using modern computer software and hardware, with a particular emphasis on problems and techniques commonly appearing in various domains of engineering. Open to students enrolled in the College of Engineering.

Prerequisites: Enrolled in the College of Engineering or MA ACT of at least 23 or equivalent.

## EGR 103 Engineering Exploration II

2 credits Lecture and Lab New course Arts \& Creativity
Course Description: Engineering Exploration II focuses on a semester long creative engineering design project with students working in teams to apply the skills and tools introduced in EGR 101 (or EGR 112) and EGR 102. Topics and assignments include more in depth engagement with engineering tools for modeling, analysis, visualization, programming, hardware interfacing, team development, documentation and communication. Students gain experience in project management, identifying constraints, accepting and providing critical analysis, iterating to refine their work, and technical report writing.

Prerequisites: Prereq: EGR 102 or equivalent; Prereq or concur: MA 113

## EGR 112 Engineering Exploration for Transfer Students

1 credit Lecture $\quad$ New course Arts \& Creativity
Course Description: Engineering Exploration for Transfer Students welcomes transfer students to the College of Engineering and introduces them to the creativity inherent in how engineers and computer scientists approach innovation, design and problem solving from blue sky brainstorming to implementing a solution. Students will work in teams, practice with tools of the trade (modeling, analysis and visualization), provide peer reviews and discuss ethical implications of creative endeavors. This class is also a process of personal discovery where students explore a variety of traditional and nontraditional study and learning methods, reflect on the results of using different methods and determine what work best for their individual learning styles and personality type. The final individual artifact is a

Create Your Future project describing the student's exploration of their own talents and aptitudes, discovery process for identifying a specific discipline and a visual presentation of their career goals. Students who received credit for EGR 101 are not eligible for EGR 112..

Prerequisites: Enrolled in the College of Engineering or MA ACT of at least 23 or equivalent. Students who received credit for EGR 101 are not eligible for EGR 112.

## UK Core Arts \& Creativity Request:

Credit for Intellectual Inquiry - Arts \& Creativity is requested for EGR 101, 103 and 112 to provide students with a total of 3 credit hours from two courses. EGR 101 for freshmen and EGR 112 for transfer students include personal reflection assignments, peer feedback and an individual design project on their plans for becoming a successful engineering student. The technical tools used in all three courses are different approaches which can be used independently or simultaneously to design and solve engineering problems. Students will be introduced to disciplinary practices from all engineering degree programs, appropriate resources from each discipline and opportunities for co-curricular involvement with student organizations and local professional societies. The semester-long design project in EGR 103 will involve identifying constraints and requirements, preliminary design reviews and a critical design review where their creative output will be evaluated and feedback into refining their product. The final product will include written and graphical documentation, a working prototype and demonstration of the prototype accomplishing the goals defined at the start of the project.

Active learning methods will be used in EGR 101 and 112 to stimulate small group discussion and peer review of student success strategies, problem solving methods and team teaching of technical skills. The Design Your Process project on individual student success is a fulfillment-focused creative process encouraging students to set academic and professional goals, take personal responsibility for their progress and enjoy time on task in rigorous challenging courses. The team design projects in EGR 103 will be more constraint-focused and product-focused creative endeavors working with a somewhat limited set of materials. Risk-taking will be encouraged in the safer virtual domains of software, simulation, visualization and optimization before committing to the real world assembly of the prototype. Tools including hardware and software, and information literacy on the many aspects of design will be presented and quizzed on a weekly basis. In addition to getting involved in student organizations, students in EGR 101 will be expected to attend a minimum of four Engineering Information Sessions and reflect on the information in preparation for the Change of Major and registration for discipline specific courses.

## Structure, Oversight and Assessment of the First-Year Engineering Curriculum:

The FYE Curriculum is under the leadership of the Director, Dr. Janet Lumpp. In the development phase, the Department Chairs and Directors of Undergraduate Studies have provided input as well as a committee of representatives from each degree program defining the technical content appropriate for each EGR course. Regular Title Series Faculty, Lecturers, Staff and Special Title Series Faculty will teach the multiple sections of EGR 101, 102, 103 and 112, along with graduate and undergraduate teaching assistants. In anticipation of a Fall 2016 launch of the new courses, the College of Engineering plans to
hire 4 or 5 additional Lecturers and/or Special Title Series Faculty with academic appointments in departments and effort assigned by the Dean of Engineering to the FYE Curriculum. An Advisory Committee will be formed with one tenured Associate or Full Professor representative from each engineering degree program. The Advisory Committee will conduct annual performance reviews of the Lecturers and STS Faculty, review student course evaluations and evaluate progress toward goals set by the Dean for recruitment, retention and graduation. In addition, the Advisory Committee will help identify discipline specific content for EGR course assignments and assess how the EGR content is impacting the students and courses during the sophomore, junior and senior years. As part of the annual review process, the Director will solicit input from all of the faculty teaching sections of the EGR 101, 102, 103 and 112 courses and present the results to the Advisory Committee. The Advisory Committee may recommended changes which will then be taken to the FYE Faculty and Associate Dean for Administration and Academic Affairs for consideration. Changes will be subject to the appropriate College and University approval procedures which may include review by the College of Engineering Faculty as the faculties of record.

## College of Engineering Process and Faculty Approval

Beginning Spring 2014, Dean John Walz and Associate Dean Kim Anderson visited a number of Universities that currently have a Freshman Engineering Program. These included Ohio State, Purdue, University of Michigan and Michigan State. On July 17, 2014, the proposal to adopt a First Year curriculum was discussed with the Chairs and Associate Deans at an all-day retreat. During Fall 2014 and Spring 2015, the Directors of Undergraduate Studies in the College of Engineering and a working group of interested faculty worked on both the First Year Engineering curriculum and the engineering courses that would be offered as part of the program. Each group met at least once a month during this time. On April 28, 2015, a College of Engineering Faculty meeting was held where the proposed curriculum was presented to the faculty in attendance. The PowerPoint slides were then circulated to the entire faculty for their review. Also in Spring 2015, a search for the Director of the First-year Engineering Curriculum was conducted, resulting in the selection of Dr. Janet Lumpp and 50\% appointment. On May 12, 2015 a mandatory meeting with the Chairs and Directors of Undergraduate Studies was conducted with Dean Walz, Associate Dean Anderson and Dr. Lumpp to further discuss the curriculum. At this meeting, it was decided to move forward with the plans. Dr. Lumpp met at least once a month with various stakeholders over the spring and summer of 2015 including the Directors of Undergraduate Studies to develop and revise the original two-course sequence into a three-course sequence and a pathway for transfer students. Another debriefing meeting was held with the Chairs and Directors of Undergraduate Studies on July 10, 2015. During faculty retreats and meetings in August and September of 2015, the faculty in each department reviewed the course descriptions and voted to endorse the curriculum. The Directors of Undergraduate Studies then worked to revise their curricula and faculty again voted as recorded on the Curriculum Change forms. In October 2015, the entire package including the changes in the curricula, new courses and change in courses were reviewed by the College of Engineering Undergraduate Education Team and the College of Engineering faculty prior to being sent to the Undergraduate and Graduate Councils. In addition to College approval, the proposed Freshman Engineering curriculum was discussed with the Dean's Advisory Council at both Spring and Fall meetings beginning in Spring, 2014 and was very well received by members of the Council.

## Biosystems Engineering

Voted at faculty meeting on August 18-19, 2015. Passed unanimously. All active faculty were present at retreat.

Chemical and Materials Engineering
Voted at faculty meeting on August 26, 2015. Passed unanimously. 18 Chemical faculty members (4 Paducah) voted. 7 Materials faculty voted.

## Civil Engineering

Voted on August 20, 2015. The count was 18-1.

## Electrical and Computer Engineering

Voted at faculty meeting on September 29, 2015. Passed unanimously. 17 faculty members voted.

## Computer Science

Voted on August 24, 2015. The count was 18-0.
Mechanical Engineering
Voted at faculty meeting on September 24, 2015. 22 in favor and 2 against.

## Mining Engineering

Voted at faculty meeting on September $2,2015.6$ approved and 1 abstained.

## 1. General Information

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## 2. General Education Curriculum for this Program:

The new General Education curriculum is comprised of the equivalent of 30 credit hours of course work. There are, however, some courses that exceed 3 credits \& this would result in more than 30 credits in some majors.

- There is no foreign language requirement for the new Gen Ed curriculum.
- There is no General Education Electives requirement.

```
Please list the courses/credit hours currently used to fulfill the University Studies/General Education curriculum:
Intellectual Inquiry in Arts and Creativity: BAE 402 (2) and BAE 403 (2)
Intellectual Inquiry in the Humanities: Choose one course from approved list (3)
Intellectual Inquiry in the Social Sciences: Choose one course from approved list (3)
Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences: PHY 231 (4) and PHY 241 (1)
Composition and Communication I: CIS/WRD 110 (3)
Composition and Communication II: CIS/WRD 111 (3)
Quantitative Foundations: MA 113 (4)
Statistical Inferential Reasoning: BAE 202 (3)
Community, Culture and Citizenship: Choose one course from approved list (3)
Global Dynamics: Choose one course from approved list (3)
```



[^12]
## CHANGE UNDERGRADUATE PROGRAM FORM

| Social Sciences | select from list | $\underline{3}$ |
| :---: | :---: | :---: |
| Natural/Physical/Mathematical | $\frac{P H Y 231 \& P H Y}{241}$ | $4 \& 1$ |
| II. Composition and Communication |  |  |
| Composition and Communication 1 | CIS or WRD 110 | 3 |
| Composition and Communication II | CIS or WRD 111 | 3 |
| III. Quantitative Reasoning (one course in each area) |  |  |
| Quantitative Foundations ${ }^{3}$ | MA113 | 4 |
| Statistical Inferential Reasoning | BAE 202 | $\underline{3}$ |
| IV. Citizenship (one course in each area) |  |  |
| Community, Culture and Citizenship in the USA | select from list | $\underline{3}$ |
| Global Dynamics | select from list | 3 |
|  | Total General Education Hours | 34 |

3. Explain whether the proposed changes to the program (as described in sections 4 to 12) involve courses offered by another department/program. Routing Signature Log must include approval by facultv of additional department(s).

The proposed curriculum changes include the addition of EGR 101,102 and 103 , and the elimination of CS 221.

## 4. Explain how satisfaction of the University Graduation Writing Requirement will be changed.

| Current | Proposed |  |
| :--- | :--- | :--- |
| Standard University course offering. <br> List: | $\square$ Standard University course offering. <br> List: |  |
| $\square$ Specific course - list: | WRD 204 | \begin{tabular}{\|l|l|l|}
\hline
\end{tabular} |

5. List any changes to college-level requirements that must be satisfied.

| Current <br> $\square$ Standard college requirement. <br> List: | Proposed <br> Standard college requirement. <br> List: <br> $\square$ Specific required course -list: | $\square$ |
| :--- | :--- | :--- |

6. List pre-major or pre-professional course requirements that will change, including credit hours.

| Current | Proposed |
| :---: | :---: |
| CIS/WRD 110 [3] | CIS/WRD $110[3]$ |
| CIS/WRD 111 [3] | CIS/WRD 111 [3] |
| CHE 105 [4] | CHE 105 [4] |
| CHE 107 [3] | CHE 107 [3] |
| PHYY 231 [4] | PHY 231 [4] |
| PHY 241 [1] | PHY 241 [1] |
| PHY 232 [4] |  |
| PHY 242 [1] |  |

[^13] $113,123,137$ or 138 ) while students not requiring calculus should take MA 111, PHI 120 or another approved course.

## CHANGE UNDERGRADUATE PROGRAM FORM

| MA 113 [4] | MA 113 [4] |
| :---: | :---: |
| MA 114 [4] | MA 114 [4] |
| M 213 [4] | MMA213 [4] |
| MA 214 [3] |  |
| CS 221 [2] | BAE 201 [2] |
|  | WBIO 148 [3] |
| EM 221 [3] | CEE 106 [3] |
|  | $\begin{aligned} & \frac{E G R 101[1]}{E G R 102[2]} \\ & \frac{E G R 103[2]}{E} \end{aligned} P^{P}$ |

7. List the major's course requirements that will change, including credit hours.

| Current | Proposed |
| :---: | :---: |
| BAE 102 [1] |  |
| BAE 103 |  |
| BAE 201 [2] |  |
| CE 106 [3] |  |
|  |  |
|  | W1A 214 [3] |
|  | PHY 232 [4] |
| BIO 148 [3] | PHY 242 [1] |
| BIO 152 [3] | BIO 152 [3] |
| BAE 202 [3] | , BAE $202[3]$ |
| BAE 305 [3] | BAE 305 [3] |
| BAE 400 [1] | BAE 400 [1] |
| BAE 402 [2] | BAE $402[2]$ |
| BAE 403 [2] | BAE 403 [2] |
| CE 341 [3] | CE 341 [3] |
| EE 305 [3] | EE 305 [3] |
| ME 220 [3] | ME 220[3] |
| ME 325 [3] | MEE 325 [3] |
| ME 340 [3] | ME 340 [3] |
|  | EM 221[3] |
| EM 313 [3] | EM 313 [3] |
| EM 302 [3] | EM 302 [3] |

8. Does the pgm require a minor AND does the proposed change affect the required minor?N/A Yes $X$ No If "Yes," indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
|  |  |

9. Does the proposed change affect any option(s)?N/A $\square$ Yes $\triangle$ No

## CHANGE UNDERGRADUATE PROGRAM FORM

If "Yes," indicate current courses and proposed changes below, including credit hours, and also specialties and subspecialties, if any.

| Current | Proposed |
| :--- | :--- |
|  |  |

10. Does the change affect pgm requirements for number of credit hrs outside the major subject in a related field?Yes No If so, indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |

11. Does the change affect pgm requirements for technical or professional support electives? If so, indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |

12. Does the change affect a minimum number of free credit hours or support electives?
$\square$ Yes $\boxtimes$ No If "Yes," indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
|  |  |

13. Summary of changes in required credit hours:

|  | Current | Proposed |
| :---: | :---: | :---: |
| a. Credit Hours of Premajor or Preprofessional Courses: | 43 | 43 |
| b. Credit Hours of Major's Requirements: | 47 | 47 |
| c. Credit Hours for Required Minor: |  |  |
| d. Credit Hours Needed for a Specific Option: |  |  |
| e. Credit Hours Outside of Major Subject in Related Field: |  |  |
| f. Credit Hours in Technical or Professional Support Electives: | $\underline{24}$ | 24 |
| g. Minimum Credit Hours of Free/Supportive Electives: | 3 | $\underline{3}$ |
| h. Total Credit Hours Required by Level: -100 : | $\underline{27}$ | 29 |
| 200: | 33 | 31 |
| 300: | 22 | $\underline{22}$ |
| 400-500: | 14 | 14 |
| i. Total Credit Hours Required for Graduation: | $\underline{129}$ | 132 |

14. Rationale for Change(s) - If rationale involves accreditation requirements, please include specific references to that.

The proposed changes incorporate the new College of Engineering First-Year Engineering courses EGR 101, 102 and 103, remove BAE 102 and 103, and remove CS. 221.
15. List below the typical semester by semester program for the major. If multiple options are available, attach a

## CHANGE UNDERGRADUATE PROGRAM FORM

separate sheet for each option.

| YEAR 1-FALL: <br> (e.g. "BIO 103; 3 credits") |   <br> EGR 101 1 <br> EGR 102 2 <br> CHE 105 4 <br> CIS /WRD 110 3 <br> MA 113 4 <br> Total 14 | YEAR 1-SPRING: |   <br> EGR 103 2 <br> CIS/WRD 111 3 <br> MA 114 4 <br> PHY 231 4 <br> PHY 241 1 <br> UK Core 3 <br> Total 17 |
| :---: | :---: | :---: | :---: |
| YEAR 2-FALL : |   <br> BAE 201 2 <br> BIO 148 3 <br> MA 213 4 <br> CHE 107 3 <br> UK Core 3 <br> CE 106 3 <br> Total 18 | YEAR 2-SPRING: | BAE 202 3 <br> MA 214 3 <br> ME 220 3 <br> EM 221 3 <br> PHY 232 4 <br> PHY 242 1 <br> Total 17 |
| YEAR 3 - FALL: | CE 341 4 <br> EE 305 3 <br> EM 313 3 <br> BIO 152 3 <br> WRD 204 3 <br> Total 16 | YEAR 3 - SPRING: |  17 <br> ME 325 3 <br> BAE 305 3 <br> EM 302 3 <br> Bio Sci Elective 3 <br> Core Elective 3 <br> Total 15 |
| YEAR 4 - FALL: | BAE 402 2 <br> BAE 400 1 <br> Core or Tech Elective 3 <br> Core or Tech Elective 3 <br> Core or Tech Elective 3 <br> Tech Elective 3 <br> UK Core 3 <br> Total 18 | YEAR 4 -SPRING: | BAE 403 2 <br> ME 340 3 <br> Core or Tech Elective 3 <br> Core or Tech Elective 3 <br> UK Core 3 <br> Supporting Elective 3 <br> Total 17 |

## Signature Routing Log

## General Information:

Current Degree Title and Major Name: Biosystems Engneering
Proposal Contact Person Name: Czarena Crofcheck Phone: $\mathbf{2 1 8 - 4 3 4 9}$

Email:
crofcheck@uky.edu

INSTRUCTIONS:
Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

## Internal College Approvals and Course Cross-listing Approvals:

| Reviewing Group | Date Approved | Contact Person (name/phone/email) | Signature |
| :---: | :---: | :---: | :---: |
| BAE Faculty | 8/19/2015 | Sue Nokes / 8-4328 / sue.nokes@uky.edu | tue ${ }^{\text {PTokes }}$ |
| CoEFaculty | 10/22/15 | Kimberly $/ 7-1864 /$ Kimberly, onderso <br> Anderson 1 |  |
|  |  | 11 |  |
|  |  | 11 |  |

## External-to-College Approvals:

| Council | Date <br> Approved | Signature | Approval of <br> Revision |
| :---: | :---: | :---: | :---: |
| Undergraduate Council | $12 / 15 / 15$ | Joanie Ett-Mims |  |
| Graduate Council |  |  |  |
| Health Care Colleges Council |  |  |  |
| Senate Council Approval |  | University Senate Approval |  |

Comments:
$\square$

[^14]| Bachelor of Science in Biosystems Engineering |  |  |  |
| :---: | :---: | :---: | :---: |
| Common First Year |  |  |  |
| Freshman Year |  |  |  |
| First Semester |  | Second Semester |  |
| EGR 101 | 1 | EGR 103 | 2 |
| EGR 102 | 2 | MA 114 Calculus II | 4 |
| CHE 105 Gen College Chemistry I | 4 | UK Core (Composition and Comm II) | 3 |
| UK Core (Composition and Comm I) | 3 | PHY 231 General Physics | 4 |
| MA 113 Calculus I | 4 | PHY 241 General Physics Lab UK Core | 1 3 |
| Semester Hours | 14 | Semester Hours | 17 |
| Sophomore Year |  |  |  |
| First Semester |  | Second Semester, |  |
| BAE 201 Economic Analysis for Biosystems | 2 | BAE 202 Statistical Inference for Biosystems (UKCD | 3 |
| BIO 148 Principles of Biology I | 3 | MA 21.4 Calculus IV | 3 |
| MA 213 Calculus III | 4 | ME 220 Thermodynamics | 3 |
| CHE 107 Gen College Chemistry II | 3 | PHY 232 General Univ Physics II | 4 |
| UK Core | 3 | PHY 242 General Univ Physics II Lab | 1 |
| \|CE 106 Computer Graphics | 3 | EM 221 Statics | 3 |
| Semester Hours | 18 | Semester Hours | 17 |
| Junior Year |  |  |  |
| First Semester |  | Second Semester |  |
| CE 341 Fluid Dynamics | 4 | ME 325 Heat Transfer | 3 |
| EE 305 Electrical Circuits | 3 | BAE 305 DC Circuits and Microelectronics | 3 |
| EM 313 Dynamics | 3 | EM 302 Strength of Materials | 3 |
| Bio 152 Principles of Biology II | 3 | Bio Sci Elective | 3 |
| WRD 204 Technical Writing | 3 | Core Elective | 3 |
| Semester Hours | 16 | Semester Hours | 15 |
| Senior Year |  |  |  |
| First Semester |  | Second Semester |  |
| BAE 400 Senior Seminar | 1 | BAE 403 Biosystems Engr. Design II | 2 |
| BAE 402 Biosystems Engr. Design I | 2 | ME 340 Introduction to Mechanical Systems | 3 |
| Core or Tech Elective | 3 | UK Core | 3 |
| Core or Tech Elective | 3 | Core or Tech Elective | 3 |
| Core or Tech Elective | 3 | Core or Tech Elective | 3 |
| Tech Elective | 3 | Supporting Elective | 3 |
| UK Core | 3 |  |  |
| Semester Hours | 18 | Semester Hours | 17 |

This is only to be used as an illustrative schedule.
Advisor should be seen every semester.
Total 132

Some classes are not available every semester.
C - Core course ( 9 credits)
TE - Technical Electives (12 credits)
BE - Biological Science Elective (3 credits)

## Biosystems Engineering <br> Engineering Standing Requirements

## Current Requirements:

Completion of a minimum of 35 semester hours acceptable towards the degree in biosystems engineering with a minimum cumulative grade-point average of 2.50 . Completion of CIS/WRD 110, MA 113, MA 114, MA 213, CHE 105 and PHY 231 with a minimum cumulative GPA of 2.50 in these courses. University repeat options may be utilized as appropriate. Students who do not meet these GPA requirements may request consideration based upon departmental review if both of these GPA values are 2.25 or greater.

## Proposed Requirements:

Completion of a minimum of 35 semester hours acceptable towards the degree in biosystems engineering with a minimum cumulative grade-point average of 2.50 . Completion of CIS/WRD 110, MA 113, MA 114, MA 213, CHE 105 and PHY 231 with a minimum cumulative GPA of 2.50 in these courses. University repeat options may be utilized as appropriate. Students who do not meet these GPA requirements may request consideration based upon departmental review if both of these GPA values are 2.25 or greater.
(no changes)

## Summary of changes

EGR 101 replaces BAE 102
EGR 102 replaces CS 211
EGR 103 replaces BAE 103

PHY 231/241 moved to freshman year, second semester (from sophomore year, first semester) CHE 107 moved to sophomore year, first semester (from freshman year, second semester) CE 106 moved to the sophomore year, first semester (from freshman year, second semester) UK Core moved to freshman year, second semester Other UK core classes moved to even out credits

# College of Engineering 

Biosystems and Agricultural
Engineering
128 C. E. Barnhart Building
Lexington, KY 40546-0276
(859) 257-3000

Fax: (859) 257-5671
http://www.bae.uky.edu
October 1, 2015
Please find attached our Change of Undergraduate Program Form.
Basically, we are proposing to replace BAE 102 with EGR 101, replace CS 221 with EGR 102, and replace BAE 103 with EGR 103. The content in these new EGR classes are equally complimentary to our program as the class we are replacing. There is no change in the total number of credits required. There is no change in the requirements for engineering standing.

Please let me know if there are any questions.
Sincerely,
Gavin Ciofherk

Czarena Crofcheck, Ph. D., P.E.
BAE Director of Undergraduate Studies, Professor

## Brandenburg, Barbara J

Subject:
FW: Re: Enrollment changes due College of Engineering Curriculum Changes

Janet,
Thank you for making me aware of the impact of these changes.
I have discussed this with my Director of Undergraduate students Jurek Jaromczyk and with my faculty and we understand that these changes will have impact on the enrollment in our courses.
Best,
Brent

On Thu, Sep 24, 2015 at 12:06 PM, Janet K. Lumpp [jklumpp@uky.edu](mailto:jklumpp@uky.edu) wrote:
Dr. Seales,
As you know, the degree programs in the College of Engineering are all proposing undergraduate Curriculum Changes as a result of the First-Year Engineering courses and other departmental initiatives. I am writing to make you aware of the changes that will affect several Computer Science courses no carlier than the Fall 2016 semester. As part of the proposal package, we need to include a reply from you acknowledging that you are aware of the changes that will impact enrollment in these courses.

CS 270 will be required for BS degrees in Computer Engineering
CS 115 will no longer be required for BS degrees in Computer Engineering and Electrical Engineering
CS 221 will no longer be required for BS degrees in Biosystems Engineering, Civil Engineering, Materials
Engineering, Mechanical Engineering and Mining Engineering
CS 441 will no longer be required for BS degrees in Computer Engineering
CS 470 will no longer be required for BS degrees in Computer Engineering
Please reply all at your earliest convenience.
Thanks,
Janet
--
Dr. Janet K. Lumpp - University of Kentucky
Director, First-Year Engineering Program
Professor, Electrical \& Computer Engineering
email: iklumpp@uky.edu
phone: 859-257-4985

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## CHANGE UNDERGRADUATE PROGRAM FORM

1. General Information


## 2. General Education Curriculum for this Program:

The new General Education curriculum is comprised of the equivalent of 30 credit hours of course work. There are, however, some courses that exceed 3 credits \& this would result in more than 30 credits in some majors.

- There is no foreign language requirement for the new Gen Ed curriculum.
- There is no General Education Electives requirement.

Please list the courses/credit hours currently used to fulfill the University Studies/General Education curriculum: Intellectual Inquiry in Arts and Creativity: CME 455 [3]
Intellectual Inquiry in the Humanities: Choose one course from approved list [3]
Intellectual Inquiry in the Social Sciences: Choose one course from approved list [3]
Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences: CHE 105 [4] and CHE 111 [1]
Composition and Communication I: CIS/WRD 110 [3]
Composition and Communication II: CIS/WRD 111 [3]
Quantitative Foundations: MA 113 [4]
Statistical Inferential Reasoning: STA 210 [3]
Community, Culture and Citizenship in the USA: Choose one course from approved list [3]
Global Dynamics: Choose one course from approved list [3]

| Please identify below the suggested courses/credit hours to fulfill the General Education curriculum. |  |  |  |
| :--- | :---: | :---: | :---: |
| General Education Area | Course | Credit Hrs |  |
| I. Intellectual Inquiry (one course in each area) |  |  |  |
| Arts and Creativity | CME 455 | 3 |  |

[^15]
## CHANGE UNDERGRADUATE PROGRAM FORM


3. Explain whether the proposed changes to the program (as described in sections 4 to 12) involve courses offered by another department/program. Routing Signature Log must include approval by faculty of additional department(s).

Proposed curriculum includes components of College of Engineering first-year sequence: EGR 101, 102,103. In addition, proposed curriculum includes changes to the structure of the required electives. Currently, a chemistry elective is a required component of the curriculum, as well as a biology or materials elective. In the new curriculum, science/math, engineering and chemical engineering electives are required. Also, PHY 241 has been removed and STA 381 will now be a required course, replacing STA 210.
4. Explain how satisfaction of the University Graduation Writing Requirement will be changed.

| Current | Proposed |
| :---: | :---: |
| Standard University course offering. List: $\qquad$ | Standard University course offering. List: $\qquad$ |
| 入 Specific course - list: WRD 204 | \ Specific course)-list: WRD 204 |

5. List any changes to college-level requirements that must be satisfied.

6. List pre-major or pre-professional course requirements that will change, including credit hours.

| Current |
| :--- |
| CIS/WRD 110[3] |
| CIS/WRD 111 [3] |
| CHE 105 [4] |
| CHE 107 [3] |

```
Proposed
    CIS/WRD 110 [3]
    CIS/WRD 111 [3]
    CHE 105 [4]
    CHE 107 [3]
    CHE 111 [1]
```

[^16]
## CHANGE UNDERGRADUATE PROGRAM FORM

| CHE 113 [2] | CHE 113 [2] |
| :---: | :---: |
| CME 200 [3] | CME 200 [3] |
| MA 113 [4] | MA 113 [4] |
| MA 114 [4] | MA 114 [4] |
| MA 213 [4] | MA 213 [4] |
| PHY 231 [4] | PHY 231 [4] |
| PHY 241 [1] |  |
|  | EGR 101 [1] |
|  | EGR 102 [2] |
|  | EGR 103 [2] |
|  | MSE 201 [3] |

7. List the major's course requirements that will change, including credit hours.

| Current | Proposed |  |
| :---: | :---: | :---: |
| CME 101 [1] |  |  |
| CHE 230 [3] | CHE 230 [3] |  |
| CHE 231 [1] | CHE 231 [1] |  |
| CHE 232 [3] | CHE 232 [3] |  |
| CHE 446G [3] | CHE 446G [3] |  |
| MA 214 [3] | MA 214 [3] |  |
| PHY 232 [4] | PHY 232 [4] |  |
| MSE 201 [3] |  |  |
| CME 22.0 [3] | CME 220 [3] |  |
| CME 320 [4] | CME 320 [4] |  |
| CME 415 [3] | CME 415 [3] |  |
| CME 006 ( 3 semesters) [0] | CME 006 ( 3 semesters) [0] |  |
| CME 330 [3] | CME 330 [3] |  |
| CME 470 [2] | CME 470 [2] |  |
| CME 420 [3] | CME 420 [3] |  |
| CME 425 [4] | CME 425 [4] |  |
| CME 432 [2] | CME 432 [2] |  |
| CME 433 [3] | CME 433 [3] |  |
| CME 455 [3] | CME 455 [3] |  |
| CME 550 [3] | CME 550 [3] |  |
| CME 456 [4] | CME 456 [4] |  |
| CME 462 [3] | CME 462 [3] |  |

8. Does the pgm require a minor AND does the proposed change affect the required minor区 N/AYes $\square$ No If "Yes," indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
|  |  |

9. Does the proposed change affect any option(s)? If "Yes," indicate current courses and proposed changes below, including credit hours, and also specialties and subspecialties, if any.

| Current | Proposed |
| :--- | :--- |
|  |  |

## CHANGE UNDERGRADUATE PROGRAM FORM

10. Does the change affect pgm requirements for number of credit hrs outside the major subject in a related field?
If so, indicate current courses and proposed changes below.

| Current | $\cdot$ |
| :--- | :--- |
|  | Proposed |

11. Does the change affect pgm requirements for technical or professional support electives?

If so, indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
| Chemical Engineering Electives [6] | Chemical Engineering Electives [3-9] |
| Chemistry Elective [3] | Science/Math Electives [3-6] |
| Biology or Materials Elective [3] | Engineering Electives [0-6] |
| Technical Elective [3] | TOTAL $=12$ credits |
| TOTAL $=15$ credits |  |

12. Does the change affect a minimum number of free credit hours or support electives? If "Yes," indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
|  |  |

13. Summary of changes in required credit hours:

|  | Current | Proposed |
| :---: | :---: | :---: |
| a. Credit Hours of Premajor or Preprofessional Courses: | 36 | 43 |
| b. Credit Hours of Major's Requirements: | 61 | $\underline{57}$ |
| c. Credit Hours for Required Minor: | N/A | N/A |
| d. Credit Hours Needed for a Specific Option: | N/A | $N / A$ |
| e. Credit Hours Outside of Major Subject in Related Field: | N/A | $N / A$ |
| f. Credit Hours in Technical or Professional Support Electives: | 15 | $\underline{12}$ |
| g. Minimum Credit Hours of Free/Supportive Electives: | $\underline{3}$ | $\underline{3}$ |
| h. Total Credit Hours Required by Level: 100: | 25 | $\underline{29}$ |
| - 200: | 38 | 34 |
| 300: | 7 | 10 |
| 400-500: | 33 | 33 |
| i. Total Credit Hours Required for Graduation: | 133* <br> Credit hrs. by level do not include UK core or elective requirements where level is unknown. | 133* |

14. Rationale for Change(s) - if rationale involves accreditation requirements, please include specific references to

## CHANGE UNDERGRADUATE PROGRAM FORM

that.
See attached cover memo for a detailed description. The proposed changes add the College of Engineering first-year sequence EGR 101, 102 and 103, remove CME 101 and PHY 241, and replace STA 210 with STA 381. Also, the upper-level electives structure is revised to provide greater flexibility to students to pursue specific interests in science and engineering fields.
15. List below the typical semester by semester program for the major, If multiple options are available, attach a separate sheet for each option.

| YEAR 1 - FALL: <br> (e.g. "BIO 103; 3 credits") | CIS/WRD 110 [3]MA 113 [4]EGR 101 [1] <br> EGR 102 [2] <br> CHE 105 [4] <br> CHE 111 [1] CME 200 3 . | YEAR 1-SPRING: |  |
| :---: | :---: | :---: | :---: |
| YEAR 2 -FALL : | CME 200 [3] <br> MA 213 [4] <br> CHE 107 [3] <br> CHE 113 [2] <br> MSE 201 [3] <br> UK Core [3] | YEAR 2-SPRING: |  |
| YEAR 3 - FALL: |  | YEAR 3 - SPRING: | CME $006[0]$ <br> CME $420[3]$ <br> CME $425[4]$ <br> CME $432[2]$ <br> CHE $232[3]$ <br> Eng/Science Elective [3] <br> UK Core [3] |
| YEAR 4 - FALL: | CME 006 [0] CME 470[2] CME 433 [3] CME 455 [3] CME 550 [3] UK Core [3] Eng/Science Elective [3] | YEAR 4 -SPRING: | CME 006 [0] <br> CME 456 [4] <br> CME 462 [3] <br> Eng/Science Elective [3] <br> Eng/Science Elective [3] <br> Supportive Elective [3] |

## Signature Routing Log

## General Information:

Current Degree Title and Major Name: Bachelor of Science in Chemical Engineering
Proposal Contact Person Name: Barbara Knutson Phone: 257-5715 Email: bknut2@uky.edu

INSTRUCTIONS:
Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

## Internal College Approvals and Course Cross-listing Approvals:



## External-to-College Approvals:



Comments:
,

[^17]
## Fall 2015

PROPOSED CHANGE IN UNDERGRADUATE PROGRAM BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING SUBMITTED BY: PROF. BARBARA KNUTSON

## ENGINEERING STANDING REQUIREMENTS

Current Requirements:
Chemical Engineering: Completion of CHE 105, CHE 107, CHE 111, CHE 113, MA 113, MA 114, MA 213, PHY 231, PHY 241, CIS/WRD 110 with a minimum cumulative grade-point average of 2.50 in these courses. Completion of CME 200 with a grade of C or better. University repeat options may be applied as appropriate.

## Proposed Requirements:

Chemical Engineering: Completion of CHE 105, CHE 107, CHE 111, CHE 113, MA 113, MA 114, MA 213, PHY 231, CIS/WRD 110 with a minimum cumulative gradesoint average of 2.50 in these courses. Completion of CME 200 with a grade of C or better. University repeat options may be applied as appropriate.
(note removal of PHY 241)

## PROPOSED CHANGE IN UNDERGRADUATE PROGRAM

## BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

## SUBMITTED BY: PROF. BARBARA KNUTSON

## OVERVIEW:

The Department of Chemical and Materials Engineering submits proposed curriculum changes to the Bachelor of Science degree in Chemical Engineering. The proposed changes have been initiated to incorporate the components of the College of Engineering's first-year sequence, which is comprised of a total of five credits at the 100-level, as follows:

EGR 101 Engineering Exploration I [1 credit]
EGR 102 Fundamentals of Engineering Computing [2 credits]
EGR 103 Engineering Exploration II [2 credits]
The incorporation of EGR 101, 102 and 103 will result in the elimination of CME 101 Introduction to Chemical Engineering, as much of the content in this course will be covered in EGR 101. In addition, the faculty in the Department of Chemical and Materials Engineering have elected to remove PHY 241 - General University Physics Laboratory I. A number of the beneficial elements encompassed in PHY 241 (coordinated teamwork and technical report generation) will be addressed in an engineering context in EGR 103.
STA 381 (Engineering Statistics) will now be a requirement for satisfaction of the UK Core component in Statistical Inferential Reasoning. This will replace the prior requirement of STA 210 (Making Sense of Uncertainty: An Introduction to Statistical Reasoning).
As part of the proposed changes in the curriculum, the upper-level electives structure will be revised to provide greater flexibility to students to pursue specific interests in science and engineering fields. The new electives structure will result in a net reduction of three credits in the electives required for the degree.
The introduction of the various changes outlined above will result in no net change to the total number of hours required for the BS degree in Chemical Engineering, which will remain at 133 . hours.

## DETAILS OF THE PROPOSED CHANGES:

Please refer to the proposed (semester-by-semester) course sequence, attached.
The following required courses will be added to the BSChE curriculum:

$$
\text { EGR } 101 \text { Engineering Exploration I [1] }
$$

EGR 102 Fundamentals of Engineering Computing ..... [2]
EGR 103 Engineering Exploration II ..... [2]
STA 381 Engineering Statistics ..... [3]

The following required courses will be removed from the BSChE curriculum:
CME 101 Introduction to Chemical Engineering
PHY 241 General University Physics Laboratory I [1]
STA 210 An Introduction to Statistical Reasoning [3]
The current elective structure for the BSChE degree is detailed in the University Bulletin:

## Chemical Engineering Electives Hours

Total of 6 credit hours must be chosen. Courses recommended are listed below. Other courses may be considered, each on its individual merit. CME 395 (Research) may count for one elective, but not both. CME 395, 404G, 505, 515, 542, 554, 556, 580, 599.

## Technical Electives

## [3]

Select one (must be a 3 or more credit hour course) from the following:
CME 395, 404G, 505, 515, 542, 554, 556, 580, 599; CHE 226, 510 and above; CS 321 and above; MA 321, 322, 416G, 432G, 433G, 471G, 481G; PHY any above 241; STA 381 and higher; BCH 401G; MSE 301, 401G, 402G, 403G; any BIO 148 and above; any engineering course above that required, e.g. above ME 330.

## Chemistry Elective

[3]
CHE 226, 250, 510 and above (if not taken as technical elective). Students may also use CHE 395 with departmental approval.

Bio or Materials Elective
BIO 148 and above; MSE 301 and above (if not taken as technical elective).

The proposed elective structure is presented below and is intended to provide chemical engineering students with greater freedom to select a group of chemical engineering electives, engineering electives, and science/math electives that best matches their interests and career goals. As part of the proposed revision, the total number of elective credits will be reduced by three hours as compared to the current BSChE curriculum.

## Proposed Electives Structure:

Engineering/science electives (totaling three or more credit hours for each course) [12]
Students must select four courses, as follows:

1. One chemical engineering elective (CME $395^{*}, 404 \mathrm{G}, 505,515,542,554,556,580,599$ )
2. One science/math elective (totaling three or more credit hourst) that is not a more elementary version of a required course.
a. Math (MA 321, 322, 416G, 432G, 433G, 471G, 481G)
b. Chemistry (CHE 226, 250, 510 and above)
c. Biology (BIO 148 and above)
d. Physics (PHY 241 and above)
e. other courses by approval of Director of Undergraduate Studies
3. One engineering elective (level 300 and above) that does not significantly duplicate content in a core chemical engineering course (e.g. ME 330) OR a CME elective (CME 395 and above).
4. One chemical engineering elective (CME 395 and above) OR one engineering elective (level 300 and above) OR one science/math elective as described above.

* CME 395 ( 3 credits) can be used to satisfy only one elective requirement.
tStudents may combine multiple qualifying courses that total 3 credits (e.g. pre-medical students may wish to combine PHY 241, 242 and CHE 233).


## Supportive Elective

The supportive elective can be any course that carries college credit and is not a more elementary version of a required course. The student completing 3 co-op tours (EGR 399) may count the coop experience toward the supportive elective.

## Impact of Proposed Changes on Accreditation:

ABET accreditation requires the following with respect to the curriculum:
The curriculum requirements specify subject areas appropriate to engineering but do not prescribe specific courses. The faculty must ensure that the program curriculum devotes adequate attention and time to each component, consistent with the outcomes and objectives of the program and institution. The professional component must include:
(a) one year of a combination of college level mathematics and basic sciences (some with experimental experience) appropriate to the discipline. Basic sciences are defined as biological, chemical, and physical sciences.
(b) one and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study.
(c) a general education component that complements the technical content of the curriculum and is consistent with the program and institution objectives.
Students must be prepared for engineering practice through a curriculum culminating in a major design experience based on the knowledge and skills acquired in earlier course work and incorporating appropriate engineering standards and multiple realistic constraints.
One year is the lesser of 32 semester hours (or equivalent) or one-fourth of the total credits required for graduation.

The proposed BSChE curriculum readily satisfies all aspects of the ABET curriculum requirement (re: Table).

|  | Math/Science | Engineering | Gen. Education | Other |
| :--- | :---: | :---: | :---: | :---: |
| ABET Requirement | 32 | 48 | N/A | N/A |
| Current BSChE <br> Curriculum | 50 | 53 | 24 | 6 |
| Proposed BSChE <br> Curriculum | 49 | 55 | 21 | 8 |

Impact of Proposed Changes on Total Credits for BSChE Degree:
Current curriculum: 133 credits
Proposed curriculum: 133 credits

## Bachelor of Science in Chemical Engineering Curriculum

## [Proposed]

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| First Semester <br> CIS/WRD 110 Comp. and Commun. I <br> MA 113 Calculus I <br> EGR 101 Engineering Exploration I <br> EGR 102 Fundamentals of Eng. Computing <br> CHE 105 General College ChemistryI <br> CHE 111 Chemistry Lab I | $\begin{gathered} 3 \\ 4 \\ 1 \\ 2 \\ 4 \\ 1 \\ 15 \end{gathered}$ | Second Semester CIS/WRD 111 Comp. and Commun. II MA 114 Calculus II EGR 103 Engineering Exploration II PHY 231 General University Physics I UK Core-1 | 3 4 2 4 3 16 |
| SOPHOMORE YEAR |  |  |  |
| First Semester <br> CME 200 Process Principles <br> MA 213 Calculus III <br> CHE 107 General College Chemistry II <br> CHE 113 Chemistry Lab II <br> MSE 201 Materials Science <br> UK Core - 2 | $\begin{gathered} 3 \\ 4 \\ 3 \\ 2 \\ 3 \\ 3 \\ 3 \\ \hline \end{gathered}$ | Second Semester <br> CME 320 Engineering Thermodynamics CME 220 Comp. Tools in Chemical Engr. MA 214 Calculus IV PHY 232 General University Physics II STA 381 Engineering Statístics | 4 3 3 4 3 17 |
| JUNIOR YEAR |  |  |  |
| First Semester <br> CME 415 Separation Processes CME 330 Fluid Mechanics CHE 446G Physical Chemistry CHE 230 Organic Chemistry CHE 231 Organic Chemistry Lab I WRD 204 Technical Writing (GCCR) | $\begin{gathered} 3 \\ 3 \\ 3 \\ 3 \\ 1 \\ 3 \\ 16 \end{gathered}$ | Second Semester <br> CME 006. Engineering Profession <br> CME 420 Process Modeling <br> CME 425 Heat and Mass Transfer <br> CME 432 Chemical Engineering Lab 1 <br> CHE 232 Organic Chemistry II <br> Eng/Science Elective-1 <br> UK Core - 3 | $\begin{aligned} & 0 \\ & 3 \\ & 4 \\ & 2 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 18 \end{aligned}$ |
| SENIOR YEAR |  |  |  |
| First Semester <br> CME 006 Engineering Profession CME 470 Professionalism, Ethics \& Safety CME 433 Chemical Engineering Lab II CME 455 Chemical Engr. Process Design I CME 550 Chemical Reactor Design UK Core-4 Eng/Science Elective-2 | $\begin{aligned} & 0 \\ & 2 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 17 \end{aligned}$ | Second Semester <br> CME 006 Engineering Profession <br> CME 456 Chemical Engr. Process Design II <br> CME 462 Process Control <br> Eng/Science Elective-3 <br> Eng/Science Elective-4 <br> Supportive Elective | 0 4 3 3 3 3 16 |

UK CORE (four classes not covered in required courses) : Humanities, Social Sciences, Global Dynamics, Community/Culture/Citizenship

## Bachelor of Science In Chemical Engineering Curriculum

## [Current]

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| First Semester <br> CME 101 Introduction to Chemical Engineering CHE 105 General College Chemistry I <br> CHE 111 Chemistry Lab <br> MA 113 Calculus I <br> CIS/WRD 110 Comp. and Commun. I <br> UK Core-Humanities | $\begin{gathered} 1 \\ 4 \\ 1 \\ 4 \\ 3 \\ 3 \\ 16 \end{gathered}$ | Second Semester <br> MSE 201 Materials Science <br> CHE 107 General College Chemistry II <br> CHE 113 Chemistry Lab <br> MA 1.14 Calculus II <br> CIS/WRD 111 Comp. and Commun. II | 3 3 3 2 4 3 15 |
| SOPHOMORE YEAR |  |  |  |
| First Semester <br> CME 200 Process Principles <br> MA 213 Calculus III <br> PHY 231 General University Physics <br> PHY 241 General Physics Lab <br> CHE 230 Organic Chemistry I <br> CHE 231 Organic Chemistry Lab I | $\begin{gathered} 3 \\ 4 \\ 4 \\ 4 \\ 1 \\ 3 \\ 1 \\ 16 \end{gathered}$ | Second Semester <br> CME 320 Engineering Thermodynamics CHE 232 Organic Chemistry II CME 220 Comp. Tools in Chemical Engr. MA 214 Calculus IV PHY 232 General University Physics | 4 4 3 3 3 4 17 |
| JUNIOR YEAR |  |  |  |
| First Semester <br> CME 415 Separation Processes CHE 446G Physical Chemistry CME 330 Fluid Mechanics WRD 204 Technical Writing (GCCR) STA 210 Statistics Technical Elective | $\begin{aligned} & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 3 \\ & 18 \end{aligned}$ | Second Semester <br> CME 006 Engineering Profession <br> CME 420 Process Modeling <br> CME 425 Heat and Mass Transfer <br> CME 432 Chemical Engineering Lab I <br> Supportive Elective <br> Chemistry Elective <br> UK Core--Social Sciences | 0 <br> 3 <br> 4 <br> 2 <br> 3 <br> 3 <br> 3 <br> 3 <br> 18 |
| SENIOR YEAR |  |  |  |
| First Semester <br> CME 006 Engineering Profession CME 470 Professionalism, Ethics \& Safety CME 433 Chemical Engineering Lab II CME 455 Chemical Engr. Process Design I CME 550 Chemical Reactor Design UK Core - Global Dynamics CME Elective | $\begin{gathered} 2 \\ 3 \\ 3 \\ 3 \\ 3 \\ 3 \\ 17 \end{gathered}$ | Second Semester <br> CME 006 Engineering Profession CME 456 Chemical Engr. Process Design II CME 462 Process Control CME Elective Bio Elective or Materials Elective UK Core - Commun, Culture, Citizenship | 0 4 4 3 3 3 3 16 |

## TOTAL HOURS $=\mathbf{1 3 3}$

## Brandenburg, Barbara J

| From: | Sumit Das [chair@pa.uky.edu](mailto:chair@pa.uky.edu) |
| :--- | :--- |
| Sent: | Monday, September 28, 2015 11:29 AM |
| To: | Lumpp, Janet K; DAS, SUMIT R |
| Cc: | Anderson, Kimberly; Brandenburg, Barbara J |
| Subject: | Re: Enrollment changes due College of Engineering Curriculum Changes |

Dear Dr. Lumpp
Thank you for letting me know about the proposal. This is to let you know that I am aware of the changes in PHY 232, 241 and 242 requirements for engineering students. This will impact the enrollment in these courses significantly.

Best

Sumit Das
On 9/24/2015 3:18 PM, Janet K. Lumpp wrote:
$>$ Dr. Das,
$>$
> The degree programs in the College of Engineering are all proposing > undergraduate Curriculum Changes as a result of new common First-Year $>$ Engineering courses and other departmental initiatives. I am writing > to make you aware of the changes that will affect several Physics $>$ courses no earlier than the Fall 2016 semester. As part of the $>$ proposal package, we need to include a reply from you acknowledging $>$ that you are aware of the changes that will impact enrollment in these $>$ courses.
$>$
>PHY 232 will no longer be required for BS degrees in Computer Science
$>$ PHY 241 will no longer be required for the BS degree in Chemical
$>$ Engineering PHY 242 will no longer be required for BS degrees in
> Computer Science
$>$
$>$ Please reply all at your earliest convenience.
$>$ Thanks,
$>$ Janet
$>$

Sumit R. Das
Professor and Chair
Department of Physics and Astronomy
University of Kentucky
Lexington, KY 40506
Phone : 859-257-1328

Subject: RE: Changes to Statistic UK Core Requirement - Please respond to this one.
Date: Thursday, February 11, 2016 at 2:57:26 PM Eastern Standard Time
From: Stromberg, Arnold
To: Anderson, Kimberly, Rayens, William S
CC: Lumpp, Janet K
We approve of these changes.

Arnold J. Stromberg
Professor and Chair
Department of Statistics
University of Kentucky
313 Multidisciplinary Science Building
725 Rose Street
Lexington, KY 40536-0082
Phone: 859-257-6115
Fax: 859-323-1973

From: Anderson, Kimberly
Sent: Thursday, February 11, 2016 2:41 PM
To: Rayens, William S; Stromberg, Arnold
Cc: Lumpp, Janet K; Anderson, Kimberly
Subject: Changes to Statistic UK Core Requirement - Please respond to this one.

## Hi Arny and Bill

Back in October, Janet Lumpp sent you an email regarding our changes to the Engineering curricula and I see where Arny responded saying that you are aware of the changes and will plan accordingly. We are now being told by the Senate Council that we need a more specific memo from you. As part of our curricular changes, we have 4 programs; Chemical Engineering, Materials Engineering, Electrical Engineering, and Computer Science who have made a change in their curricula that indicates that students are now REQUIRED to take STA 381 for the UK Core Statical Inferential Reasoning. Specifically, the changes are as follow;

Chemical Engineering: Changing UK Core Statical Inferential Reasoning from STAT 210 to STA 381
Materials Engineering: Changing UK Core Statical Inferential Reasoning from STAT 210 to STA 381

Electrical Engineering: Changing UK Core Statical Inferential Reasoning from "Choose one course from approved list" to STA 381
Computer Science: Changing UK Core Statical Inferential Reasoning from "Choose one course from approved list" to STA 381

If you are ok with these changes, please respond back and say you approve.
Thank you!
Kim

Dr. Kimberly Anderson, Associate Dean for Administration and Academic Affairs
Professor, Chemical Engineering
College of Engineering
University of Kentucky
371 Ralph G Anderson Building | Lexington, KY 40506-0030 | office 859.257.1864 | fax 859.257.5727
email kimberly.anderson@uky,edul. web http://www.engr.uky.edu

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## CHANGE UNDERGRADUATE PROGRAM FORM

## 1. General Information



## 2. General Education Curriculum for this Program:

The new General Education curriculum is comprised of the equivalent of 30 credit hours of course work. There are, however, some courses that exceed 3 credits \& this would result in more than 30 credits in some majors.

- There is no foreign language requirement for the new Gen Ed curriculum.
- There is no General Education Electives requirement.

| Please list the courses/credit hours currently used to fulfill the-University Studies/General Education curriculum: |
| :--- |
| Intellectual Inquiry in Arts and Creativity: EE 101 (3) |
| Intellectual Inquiry in the Humanities: Choose one course from approved list (3) |
| Intellectual Inquiry in the Social Sciences: Choose one course from approved list (3) |
| Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences: PHY 231 (4) and PHY 241 (1) |
| Composition and Communication I: CIS/WRD 110 (3) |
| Composition and Communication II: CIS/WRD 111 (3) |
| Quantitative Foundations: MA 113 (4) |
| Statistical Inferential Reasoning: STA 381 (3) |
| Community, Culture and Citizenship: Choose one course from approved list (3) |
| Global Dynamics: Choose one course from approved list (3) |



[^18]
## CHANGE UNDERGRADUATE PROGRAM FORM

| Social Sciences | Choose from approved list | $\underline{3}$ |
| :---: | :---: | :---: |
| Natural/Physical/Mathematical | PHY 231, PHY 241 | $\underline{5}$ |
| Il. Composition and Communication |  |  |
| Composition and Communication I | CIS or WRD 110 | 3 |
| Composition and Communication II | CIS or WRD 111 | 3 |
| III. Quantitative Reasoning (one course in each area) |  |  |
| Quantitative Foundations ${ }^{3}$ | MA 113 | 4 |
| Statistical Inferential Reasoning | STA 381 | $\underline{3}$ |
| IV. Citizenship (one course in each area) |  |  |
| Community, Culture and Citizenship in the USA | Choose from approved list | $\underline{3}$ |
| Global Dynamics | Choose from approved list | 3 |
| Total General Education Hours |  | 33 |

3. Explain whether the proposed changes to the program (as described in sections 4 to 12) involve courses offered by another department/program. Routing Signature Log must include approval by faculty of additional department(s).

The proposed curriculum change includes the addition of EGR 101, 102 and 103, addition of CS 270 and elimination of CS 115, 441 and 470.
4. Explain how satisfaction of the University Graduation Writing Requirement will be changed.

| Current | Proposed |  |
| :--- | :--- | :--- |
| $\square$ <br> Standard University course offering. <br> List: | $\square$ Standard University course offering. <br> List: |  |
| $\square$ | Specific course - list: CPE 490 | Spourse) - list: | CPE 490

5. List any changes to college-level requirements that must be satisfied.

| Current |  | Proposed |
| :--- | :--- | :--- |
| Standard college requirement. <br> List: | $\square$ Standard college requirement. <br> List: |  |
| $\square$ Specific required course - list: |  | $\square$ Specific course - list: |

6. List pre-major or pre-professional course requirements that will change, including credit hours.

| Current | Proposed |
| :--- | :--- |
| CIS/WRD $110 ; 3$ credits | CIS/WRD 110; 3 credits |
| CS $115 ; 3$ credits | CIS/WRD 111; 3 credits |
| CS $215 ; 4$ credits | CS 215; 4 credits |
| ES $211 ; 4$ credits | CS 216;3 credits |

[^19]| EE 280; 3 credits |  |  |
| :---: | :---: | :---: |
|  | CPE 282; 4 credits |  |
| MA 113; 4 credits | MA 113; 4 credits |  |
| MA 114; 4 credits. | MA 114; 4 credits |  |
| MA 213:4 credits | MA 213; 4 credits |  |
|  | CHE 105; 4 credits |  |
| PHY 231; 4 credits | PHY 231; 4 credits |  |
|  | PHY 241; 1 credit |  |
|  | PHY 232; 4 credits |  |
|  | PHY 242; 1 credit |  |
|  | EGR 101; 1 credit |  |
|  | EGR 102; 2 credits EGR 103. 2 credits |  |

7. List the major's course requirements that will change, including credit hours.

8. Does the pgm require a minor AND does the proposed change affect the required minor?N/A Yes No If "Yes," indicate current courses and proposed changes below.

| Current $\quad$ Proposed |
| :--- | :--- |

## CHANGE UNDERGRADUATE PROGRAM FORM

$\square$
9. Does the proposed change affect any option(s)?
$\square$ N/A $\square$ Yes $\boxtimes$ No If "Yes," indicate current courses and proposed changes below, including credit hours, and also specialties and subspecialties, if any.

| Current | Proposed |
| :--- | :--- |
|  |  |

10. Does the change affect pgm requirements for number of credit hrs outside the major subject in a related field?
If so, indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
|  |  |

11. Does the change affect pgm requirements for technical or professional support electives?

If so, indicate current courses and proposed changes below.

| Current |
| :--- |
| EE/CS Technical Electives; 12 credits |
| Technical Elective; 3 credits |

Proposed
CPE Technical Electives; 9 credits
Hardware/Software Electives; 6 credis
Technical Elective; 6 credits
12. Does the change affect a minimum number of free credit hours or support electives? If "Yes," indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
| Supportive Elective 6 credits | Supportive Elective ; 3 credits |

13. Summary of changes in required credit hours:

|  | Current | Proposed |
| :---: | :---: | :---: |
| a. Credit Hours of Premajor or Preprofessional Courses: | 33 | 48 |
| b. Credit Hours of Major's Requirements: | 63-66 | 46 |
| c. Credit Hours for Required Minor: |  |  |
| d. Credit Hours Needed for a Specific Option: |  |  |
| e. Credit Hours Outside of Major Subject in Related Field: |  |  |
| f. Credit Hours in Technical or Professional Support Electives: | 15 | $\underline{21}$ |
| g. Minimum Credit Hours of Free/Supportive Electives: | $\underline{6}$ | 3 |
| h. Total Credit Hours Required by Level: : 100 : | $\underline{24}$ | $\underline{24}$ |
| - ${ }^{\text {200: }}$ | 42 | 47 |
| 300: | 12 | $\underline{2}$ |
| 400-500: | $\underline{21}$ | $\underline{9}$ |
| i. Total Credit Hours Required for Graduation: | 129 | 130 |

14. Rationale for'Change(s) - if rationale involves accreditation requirements, please include specific references to that.

## CHANGE UNDERGRADUATE PROGRAM FORM

Incorporation of new First Year Engineering Program course sequence. Combining lecture and associated laboratory courses into one course number. Addition of CS270. Moving EE383 to EE287. Replacing requirements for CS441 and CS470 with electives. Restructuring of techincal and engineering electives.
15. List below the typical semester by semester program for the major. If multiple options are available, attach a separate sheet for each option.

| YEAR 1 - FALL: <br> (e.g. "BIO 103; 3 credits") | EGR 101; 1 credit EGR 102; 2 credits <br> MA 113; 4 credits CHE 105; 4 credits CIS/WRD 110; 3 credits | YEAR 1-SPRING: | EGR 103; 2 credits MA 114; 4 credits PHY 231; 4 credits PHY 241; 1 credit CIS/WRD 111; 3 credits CS 215; 4 credits |
| :---: | :---: | :---: | :---: |
| YEAR 2 - FALL : | MA 213; 4 credits PHY 232; 4 credits PHY 242; 1 credit CS 216; 3 credits CPE 282; 4 credits | YEAR 2-SPRING: | MA 214; 3 credits EE 211; 4 credits CPE287; 4 credits CS 270; 3 credits CS275; 4 credits |
| YEAR 3 - FALL: | EE 223; 4 credits CS 315; 3 credits CPE $380 ; 3$ credits STA 381; 3 credits UK Core; 3 credits | YEAR 3 -SPRING: | EE 421G; 3 credits EE461G; 3 credits Technical Elective; 3 credits CPE480; 3 credits CPE Elective; 3 credits UK Core: 3 credits |
| YEAR 4 - FALL: | CPE 490; 3 credits CPE Elective; 3 credits Technical Elective; 3 credits Supportive Elective; 3 credits UK Core; 3 credits | YEAR 4-SPRING: | CPE 491; 3 credits HW Elective; 3 credit SW Elective; 3 credit CPE Elective; 3 credits UK Core; 3 credits |

## Signature Routing Log

## General Information:

Current Degree Title and Major Name: Bachelor of Science in Computer Engineering, Computer Engineering Proposal Contact Person Name: James E. Lumpp, Jr. Phone: 257-3895 Email: jel@uky.edu

INSTRUCTIONS:
Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

## Internal College Approvals and Course Cross-listing Approvals:



## External-to-College Approvals:

| Council | Date <br> Approved | Signature | Approval of <br> Revision |  |
| :---: | :---: | :---: | :---: | :---: |
| Undergraduate Council |  | 12215115 | Joanie Ett-Mims |  |
| Graduate Council |  |  |  |  |
| Health Care Colleges Council |  |  |  |  |
| Senate Council Approval |  |  |  |  |

## Comments:

$\qquad$

[^20]|  |  | Department of Electrical and <br> Date: <br> 9/18/2015 |
| :--- | :--- | :--- |
| To: | Janet Lumpp, Director UK FYE Program | 453 F. Paul Engineering Anderson Tower |
| From: | James E. Lumpp, Jr. (jel@uky.edu, 7-3895) | Lexington, KY 40506-0046 |
| RE: | Computer Engineering Curiculum/FYE Program | Office: (859) 257-8042 |
|  |  | Fax: (859) 257-3092 |
|  | www.engr.uky.edu |  |

The ECE Faculty meet 8/19/15 and 9/3/15 and the Computer Engineering Curriculum
Committee convened meetings on 9/9/15 and 9/11/15 and agreed to the following changes to the Computer Engineering BS degree program to better serve the students in the Computer Engineering program:

- Approval of and incorporation of the First-Year Engineering Program as part of the Computer Engineering Degree Requirements
- Addition of the new CS 270 "Systems Programming" course to the Curriculum in place of one EE/CS Elective
- Replacement of CS470 with a CpE Elective.
- Replacement of CS441 with a CpE Elective.
- Reduced the number of hours of Supportive Elective from 6 hours to 3 hours
- Increased the number of hours of Technical Elective from 3 hours to 6 hours
- EE383 "Introduction to Embedded Systems" at 3 hours was changed to a new 4 hour EE287 course
- EE 221 "Circuits II" and EE222 "Circuits II Lab" were combined into a new 4 hours course EE223 "Circuits II"
- EE 280 "Design of Logic Circuits" and EE281 "Logical Design Laboratory" were combined into a new 4 hour course, EE282 "Digital Logic Design"
- One EE/CS Elective was converted into a Hardware Depth Electives
- One EE/CS Elective was converted into a Software Depth Electives
- One EE/CS Elective was converted into a CpE Elective
- Several minor changes to several 300,400 , and 500 level course prerequisites

As a result the number of hours total for the degree program was reduced from 132 to 130.
The current proposal is for Engineering Standing for Computer Engineering to change from including the following courses (total 33 hours):

CIS/WRD 110; 3 credits
CS 115; 3 credits.
CS 215; 4 credits
EE 211; 4 credits
EE 280; 3 credits
MA 113; 4 credits
MA 114; 4 credits

MA $213 ; 4$ credits
PHY 231; 4 credits
To instead include (total 34 hours):
CIS/WRD 110; 3 credits
CS 215; 4 credits
CS 216; 3 credits
CpE 282; 4 credits
MA 114; 4 credits
MA 213; 4 credits
CHE 105; 4 credits
PHY 231; 4 credits
PHY 232; 4 credits
Please let me know if I can provide any other information.

## Computer Engineering

## College of <br> Engineering


#### Abstract

Computer engineering involves modeling, design, implementation, testing, evaluation and integration of computer hardware and software to create computing systems. Computer engineers use both hardware concepts from electrical engineering and system software concepts from computer science. Graduates will be well prepared to work in areas such as digital logic design, computer organization/architecture and design, algorithm design and analysis, embedded systems, compilers, and operating systems. Elective options in the curriculum offer preparation in software engineering, databases, dependable systems, networking and communications, VLSX, graphics, image processing, visualization, artificial intelligence, and control systems. The program is offered through a partnership between the Department of Electrical and Computer Engineering and the Department of Computer Science.


## Degree Requirements

In addition to fulfilling UK Core and College of Engineering requirements, students must complete the computer engineering curriculum. The following curriculum meets the requirements for the B.S. degree.

| Freşhman Year |  |
| :---: | :---: |
| FirstSemester | Hours |
| MA 113 Calculu |  |
| EE 101 Creativity and Design in Electrical and Computer Engineering |  |
| CIS/WRD 110 Composition and Communication I ...................................... 3 |  |
| CHE 105 General College Chemistry I....................................................... 4 |  |
| CS 115 Introduction to Computer Programming ......................................... 3 |  |
| UK Core--Humanities ........................................................................ 3 |  |
| Second Semester |  |
| EE 280 Design of Logic Circuits ................................................................. 3 |  |
| MA 114 Calculus II ........................................................................... 4 |  |
| PHY 231 General University Physics ....................................................... 4 |  |
| PHY 241 General University Physics Laboratory ............................................ I |  |
| CIS/WRD 111 Composition and Communication II |  |

## Sophomore Year

FirstSemester

## Hours

CS 215 Introduction to Program Design,
Abstraction, and Problem Solving Techniques ............................................... 4
MA 213 Calculus III ...................................................................................... 4
EE211 CircuitsI................................................................................................... 4
PHY 232 General University Physics .................................................................... 4
PHY 242 General University Physics Laboratory .............................................. 1
EE 281 Logical Design Laboratory .................................................................. 2

## Second Semester

MA 214 Calculus IV
... 3
CS 275 Discrete Mathematics ..... 4
CS 216 Introduction to Software Engineering Techniques ..... 3
EE/CS 380 Microcomputer Organization .....  3
UK Core-Social Sciences .....  3

## Junior Year

## FirstSemester

Hours
EE22 1 Circuits II .....  3
EE 222Electrical Engineering Laboratory 1 ..... 2
CS 315 Algorithm Design and Analysis ..... 3
EE 383 Introduction to Embedded Systems ..... 3
UK Core-Citizenship - USA .....  3
STA 381 Engineering Statistics - A Conceptual Approach ..... 3
Second Semester
EE 461G Introduction to Electronics .....  3
CS 470 G Introduction to Operating Systems .....  3
EE 480/CS 480G Advanced Computer Architecture ${ }^{* *}$ .....  3
EE/CS Technical Elective $\dagger \dagger$ .....  3
EE 421G Signals and Systems ..... 3
Senior Year
FirstSemester ..... Hours
CS 441G Compilers for Algorithmic Languages .....  3
EE 490 Electrical Engineering Capstone Design I ${ }^{* *}, \dagger$ .....  3
EE/CS Technical Elective $\dagger \dagger$ .....  3
Supportive Elective* .....  3
Technical Elective $\dagger$ .....  3
Second Semester
EE 491 Electrical Engineering Capstone Design II ${ }^{* *}, \dot{\dagger}$ ..... 3
EE/CS Technical Electives $\dagger \dagger$ ..... 6
Supportive Elective* .....  3
UK Core-Global Dynamics ..... 3
*Supportive elective is to be chosenfromany University courses, excludingmore elementaryversionsofrequiredconrses, suchasprecalculusmathematics, MA 308, MA310or PHY 211.${ }^{* *} E E$ 480/CS $480 G$ is only taught in the spring semester. EE 490 is only taught in the fallsemester: EE 491 is only taught in the spring semester:
TTechnicalelectivemaybeselectedfrom upper-divisionengineering, wathematics, statistics, computer science, physics, or other technically-related fields excluding more elementary version ofrequired courses. To be selectedinconsultationwith academicadvisor, iftaken. CS 499 fulfills senior designandthe GCCR. Atechicalelective course mustbe takentofulfill the technicalelectiverequirementifCS499 istaken EE 490 andEE 491 filfillthetechnical elective, senior designandihe GCCR
t $\dagger$ EE/CStechnicalelectivesare senior level cowses in either the computerscienceor electrical engineering disciplines. Theseinclude 400 -levelCS courses and 500 -leveICSandEE courses with emphasis in the computer engineering area and excluding EE 595. To be selected in consultationwith academic advisor:

## Recommended EE/CSTechnicalElectives:

CS 405 G Introduction to Database Systems
CS 415G Combinatorics and Graph Theory
CS 416G Principles of Operations Research I
CS 422 Numerical Solutions of Equations
CS 450 G Fundamentals of Programming Languages
CS 463 G Introduction to Artificial Intelligence
CS 471 G Networking and Distributed Operating Systems
CS 485 G Topics in Computer Science (Subtitle required)
EE 512 Digital Communication Systems
EE 560 Semiconductor Device Design
EE 564 Digital BlectronicCircuits
EE 572 Digital Control of Dynamic Systems
EE 582 Hardware Description Languages and Programmable Logic
EE 584 Introduction of VLSI Design and Testing
EE 585 Fault Tolerant Computing
EE 586 Communication and Switching Networks
EE 587 Microcomputer Systems Design
EE 599 Topics in Electrical Engineering (Subtitle required)

[^21]CpE Plan of Study

| CIS110 | MA113 |
| :---: | :---: |
| $\downarrow$ | IV |
| CIS111 | MA114 |
|  | , |
|  | MA213 |
|  | $\downarrow$ |
|  | MA214 |
| UK CORE | STA 381 |
|  |  |
| UK CORE |  |
|  |  |
| UK CORE | Capstone |
|  |  |
| UK CORE | Capstone |

9/11/2015
Computer Engineering POS 2016
CpE Plan of Study Hours

| $1{ }^{\text {st }}$ Presh | $\begin{gathered} \text { CIS1110 } \\ 3 \end{gathered}$ | $\begin{aligned} & \text { MA113 } \\ & 4 \end{aligned}$ | $\begin{gathered} \text { CHE105 } \\ 4 \end{gathered}$ | $\begin{gathered} \text { EGR101 } \\ 1 \end{gathered}$ | $\begin{gathered} \text { EGR102 } \\ 2 \end{gathered}$ |  | 14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2^{\text {nd }}$ Fresth | $\begin{gathered} \text { CIS111 } \\ 3 \end{gathered}$ | $\begin{gathered} \text { MA114 } \\ 4 \end{gathered}$ | $\begin{gathered} \text { PHY231/241 } \\ 5 \end{gathered}$ | $\begin{gathered} \text { EGR103 } \\ 2 \end{gathered}$ | $\begin{gathered} \text { CS215 } \\ 4 \end{gathered}$ |  | 18 |
| $1^{\text {st }}$ Soph |  | $\begin{gathered} \text { MA213 } \\ 4 \end{gathered}$ | $\begin{gathered} \text { PHY232/242 } \\ 5 \end{gathered}$ |  | $\begin{gathered} \text { CS216 } \\ 3 \end{gathered}$ | $\begin{gathered} \text { CpE282 } \\ 4 \end{gathered}$ | 16 |
| $2^{\text {nd }}$ Soph |  | $\begin{gathered} \text { MA214 } \\ 3 \end{gathered}$ | $\begin{gathered} \text { EE211 } \\ 4 \end{gathered}$ | $\begin{gathered} \text { CS270 } \\ 3 \end{gathered}$ | $\begin{gathered} \text { CS275 } \\ 4 \end{gathered}$ | $\begin{gathered} \text { CpE287 } \\ 4 \end{gathered}$ | 18 |
| 1 st dunior | $\begin{gathered} \text { UK CORE } \\ 3 \end{gathered}$ | Prob/Stats 3 | $\begin{gathered} \text { EE223 } \\ 4 \end{gathered}$ | . | $\begin{gathered} \text { CS315 } \\ 3 \end{gathered}$ | $\begin{gathered} \text { CpE380 } \\ 3 \end{gathered}$ | 16 |
| $2^{\text {nd }}$ Iunior | $\begin{gathered} \text { UK CORE } \\ 3 \end{gathered}$ | Tech Elective 3 | $\begin{gathered} \text { EE421 } \\ 3 \end{gathered}$ | $\begin{gathered} \text { EE461 } \\ 3 \end{gathered}$ | CpE Elec 3 | $\begin{gathered} \text { CpE480 } \\ 3 \end{gathered}$ | 18 |
| $1^{\text {st }}$ Senior | $\begin{gathered} \text { UK CORE } \\ 3 \end{gathered}$ | Capstone 3 | Tech Elective 3 | Supp. Elec 3 |  | CpE Elec 3 | 15 |
| $2^{\text {nd }}$ Senior | $\begin{gathered} \text { UK CORE } \\ 3 \end{gathered}$ | Capstone $3$ |  | HW Elec 3 | $\begin{gathered} \text { SW Elec } \\ 3 \end{gathered}$ | CpE Elec 3 | 15 |

Computer Engineering POS 2016

UNIVERSTTY OF KENTUCKY

Date: 9/18/2015
To: UK Senate
From: James E. Lumpp, Jr,,(je!@uky.edu, 7-3895)
RE: Computer Engineering Degree Prefix

Department of Electrical and<br>Computer Engineering<br>453 F. Paul Anderson Tower<br>Lexington, KY 40506-0046<br>Office: (859) 257-8042<br>Fax: (859) 257-3092<br>www.engr.uky.edu

The College of Engineering is requesting the prefix "CPE" be established by the University of Kentucky for use with courses used in partial fulfillment of the graduation requirements for students pursuing the B.S. Computer Engineering degree. The CPE prefix will allow the College of Engineering and the Department of Electrical and Computer Engineering better communicate to students the core requirements for the degree and to better track cohorts of students as they progress through the program. This is critically important to the College for ABET accreditation that requires sufficient depth and breadth of "Engineering Topics" for degrees granted with the program name "Computer Engineering".

The UK College of Engineering voted and approved the degree program along with the CPE prefix and subsequently, the UK Senate and the state approved the Computer Engineering Degree program. Currently, the Department of Electrical and Computer Engineering is revising the Computer Engineering Degree Program in preparation for an ABET Accreditation Review in 2016.

Please feel free to contact me if you have any questions.


Subject:
FW: Re: Enrollment changes due College of Engineering Curriculum Changes

Janet, Thank you for making me aware of the impact of these changes. I have discussed this with my Director of Undergraduate students Jurek Jaromczyk and with my faculty and we understand that these changes will have impact on the enrollment in our courses.
Best,
Brent

On Thu, Sep 24, 2015 at 12:06 PM, Janet K. Lumpp [jklumpp@uky.edu](mailto:jklumpp@uky.edu) wrote:
Dr. Seales,
As you know, the degree programs in the College of Engineering are all proposing undergraduate Curriculum Changes as a result of the First-Year Engineering courses and other departmental initiatives. I am writing to make you aware of the changes that will affect several Computer Science courses no earlier than the Fall 2016 semester. As part of the proposal package, we need to include a reply from you acknowledging that you are aware of the changes that will impact enrollment in these courses.

CS 270 will be required for BS degrees in Computer Engineering
CS 115 will no longer be required for BS degrees in Computer Engineering and Electrical Engineering
CS 221 will no longer be required for BS degrees in Biosystems Engineering, Civil Engineering, Materials Engineering, Mechanical Engineering and Mining Engineering
CS 441 will no longer be required for BS degrees in Computer Engineering
CS 470 will no longer be required for BS degrees in Computer Engineering
Please reply all at your earliest convenience.
Thanks, Janet

Dr. Janet K. Lumpp - University of Kentucky
Director, First-Year Engineering Program
Professor, Electrical \& Computer Engineering
email: jklumpp@uky.edu
phone: 859-257-4985

Subject: RE: Changes to Statistic UK Core Requirement - Please respond to this one.
Date: Thursday, February 11, 2016 at 2:57:26 PM Eastern Standard Time
From: Stromberg, Arnold
To: Anderson, Kimberly, Rayens, William S
CC: Lumpp, Janet K
We approve of these changes.

Arnold J. Stromberg
Professor and Chair
Department of Statistics
University of Kentucky
313 Multidisciplinary Science Building
725 Rose Street
Lexington, KY 40536-0082
Phone: 859-257-6115
Fax: 859-323-1973

From: Anderson, Kimberly
Sent: Thursday, February 11, 2016 2:41 PM
To: Rayens, William S; Stromberg, Arnold
Cc: Lumpp, Janet K; Anderson, Kimberly
Subject: Changes to Statistic UK Core Requirement - Please respond to this one.
Hi Arny and Bill
Back in October, Janet Lumpp sent you an email regarding our changes to the Engineering curricula and I see where Arny responded saying that you are aware of the changes and will plan accordingly. We are now being told by the Senate Council that we need a more specific memo from you. As part of our curricular changes, we have 4 programs; Chemical Engineering, Materials Engineering, Electrical Engineering, and Computer Science who have made a change in their curricula that indicates that students are now REQUIRED to take STA 381 for the UK Core Statical Inferential Reasoning. Specifically, the changes are as follow;

Chemical Engineering: Changing UK Core Statical Inferential Reasoning from STAT 210 to STA 381
Materials Engineering: Changing UK Core Statical Inferential Reasoning from STAT 210 to STA 381

Electrical Engineering: Changing UK Core Statical Inferential Reasoning from "Choose one course from approved list" to STA 381
Computer Science: Changing UK Core Statical Inferential Reasoning from "Choose one course from approved list" to STA 381

If you are ok with these changes, please respond back and say you approve.

Thank you!
Kim

Dr. Kimberly Anderson, Associate Dean for Administration and Academic Affairs
Professor, Chemical Engineering
College of Engineering
University of Kentucky
371 Ralph G Anderson Building | Lexington, KY 40506-0030 | office 859.257 .1864 | fax 859.257 .5727
email kimberly.anderson@uky.edul. web http://www.engr.uky.edu

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## CHANGE UNDERGRADUATE PROGRAM FORM

## 1. General Information

| College: Engineering |  |  | Department: Computer Science |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current Major Name: | Computer Science |  | Proposed Major Name: |  |  | : Computer Science |  |
| Current Degree Title: | Bachelor of Science in Computer Science |  | Proposed Degree Title: |  |  | Bachelor of Science in Computer Science |  |
| Formal Option(s): N/ | N/A |  | Proposed Formal Option(s): N/A |  |  |  |  |
| Specialty Field w/in Formal Option: | N/A |  | Proposed Specialty Field w/in Formal Options: |  |  | $N / A$ |  |
| Date of Contact with Associate Provost for Academic Administration ${ }^{\text {² }}$ : $0^{\text {09/01/15 }}$ ( |  |  |  |  |  |  |  |
| Bulletin (yr \& pgs): | $\frac{\text { 2015-2016, }}{\text { p. 246-247 }}$ | CIP Code ${ }^{1}$ : 11.0101 |  |  |  | Today's Date: | $\underline{09 / 23 / 2015}$ |
| Accrediting Agency (if applicable): ABET |  |  |  |  |  |  |  |
| Requested Effective Date: $\boxtimes$ Semester following approval. |  |  |  | OR $\square$ Sp |  | Specific Date ${ }^{\text {2 }}$ |  |
| Dept. Contact Person: | Jerzy W. Jaromczyk |  | Phone: | 257-1186 |  | Email: jurek@cs.uky.edu |  |

## 2. General Education Curriculum for this Program:

The new General Education curriculum is comprised of the equivalent of 30 credit hours of course work. There are, however, some courses that exceed 3 credits \& this would result in more than 30 credits in some majors.

- There is no foreign language requirement for the new Gen Ed curriculum.
- There is no General Education Electives requirement.

Please list the courses/credit hours currently used to fulfill the University Studies/General Education curriculum:
Intellectual Inquiry in Arts and Creativity: Choose one course from the approved list (3)
Intellectual Inquiry in the Humanities: Choose one course from the approved list (3)
Intellectual Inquiry in the Social Sciences: Choose one course from the approved list (3)
Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences: PHY 231 (4) and PHY 241 (1)
Composition and Communication I: CIS/WRD 110 (3)
Composition and Communication II: CIS/WRD 111 (3)
Quantitative Foundations: MA 113 Calculus I (4)
Statistical Inferental Reasoning: Choose one course from the approved list (3)
Community, Culture and Citizenship: Choose one course from approved list (3)
Global Dynamics: Choose one course from approved list (3)

\left.| Please identify below the suggested courses/credit hours to fulfill the General Education curriculum. |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| General Education Area | Course | Credit Hrs |  |  |
| I. Intellectual Inquiry (one course in each area) |  |  |  |  |
|  | Arts and Creativity |  | Choose from list |  |$\right]$

[^22]
## CHANGE UNDERGRADUATE PROGRAM FORM

| Social Sciences | Choose from list | $\underline{3}$ |
| :---: | :---: | :---: |
| Natural/Physical/Mathematical | PHY 231 \& 241 | 5 |
| II. Composition and Communication |  |  |
| Composition and Communication I | CIS or WRD 110 | 3 |
| Composition and Communication II | CIS or WRD 1.11 | 3 |
| III. Quantitative Reasoning (one course in each area) |  |  |
| Quantitative Foundations ${ }^{3}$ | MA 113 | 4 |
| Statistical Inferential Reasoning | STA 381 | $\underline{3}$ |
| IV. Citizenship (one course in each area) |  |  |
| Community, Culture and Citizenship in the USA | Choose from list | $\underline{3}$ |
| Global Dynamics | Choose from list | $\underline{3}$ |
| Total General Education Hours |  | 33 |

3. Explain whether the proposed changes to the program (as described in sections 4 to 12) involve courses offered by another department/program. Routing Signature Log must include approval by faculty of additional department(s).

The proposed curricular change includes the addition of EGR 101, 102 and 103 as a part of the Common Year, the replacement of STA 281 with STA 381, the addition of MA 322 as an option to CS/MA 321, and the elimination of CS 115, PHY $232 / 242$ and CS/EE 380 from the list of current requirements as a result of adding new courses.
4. Explain how satisfaction of the University Graduation Writing Requirement will be changed.

| Current <br> $\square$ <br> Standard University course offering. <br> List: | Proposed <br> Standard University course offering. <br> List: |  |
| :--- | :--- | :--- |
| $\boxtimes$ Specific course - list: | CS 499 Senior Design | $\boxed{\text { Specific course) - list: }}$ |

5. List any changes to college-level requirements that must be satisfied.

| Current | Proposed <br> $\square$Standard college requirement. <br> List: |
| :--- | :--- |
| $\square$ <br> Standard college requirement. <br> List: |  |
| $\square$ Specific required course - list: | $\square$ |

6. List pre-major or pre-professional course requirements that will change, including credit hours.

| Current | Proposed |
| :--- | :--- |
| CS 100(1) | CIS/WRD 110 (3) |
| $\operatorname{CS~115~(3)~}$ |  |
| CS 215 (4) | CIS/WRD111 (3) |
| $\operatorname{CS~216(3)~105~(4)~}$ |  |
| $\operatorname{CS~275(4)}$ | MA 113 (4) |
| CIS/WRD 110 (3) | MA 114 (4) |

[^23]| MA 113 (4) | PHY 241 (1) |
| :---: | :---: |
| MA 114 (4) | EGR 101 (1) |
| PHY 231 (4) | EGR 102 (2) |
| PHY 241 (1) | EGR 103 (2) |
| Subtotal: Premajor hours .......................... 31 | CS 215 (4) |
|  | CS 216 (3) |
|  | CS 275 (4) |
|  | UK Core (3) |
|  | MA 213 (4) |
|  | EE 280 (3) |
|  | Subtotal: Premajor hours... .......................... 39 |

7. List the major's course requirements that will change, including credit hours.

| Current | Proposed |
| :---: | :---: |
| PHY 232 (4) | CS 270 (3) |
| PHY 242 (1) | STA 381 (3) |
| Additional Science Electives (6) | Additional Science Electives (6) |
| MA 213 (4) | $\operatorname{CS} 315$ (3) |
| EE 280 (3) | CS/MA 321 (3); |
| STA 281 (3) | or MAA 322 (3) |
| CS 315 (3) | CS 371 (3) |
| CS/MA 321 (3) | CS 375 (3) |
| CS 375 (3) | CS 498 G (3) |
| CS/EE 380 (3) | CS 499 (3) |
| CS 470G (3) | Subtotal: Major hours ................................ (30) |
| CS 499 (3) | Computer Science Electives (15) |
| Subtotal: Major hours ................................ (39) | Choose five CS classes at the 300-level or above with |
| Computer Science Electives (9)) | at least three from the following list: |
| Choose three from the following list: | CS 335 (3) |
| CS 335 (3) | CS 378 (3) |
| CS 405G (3) | CS 405G (3) |
| CS 441G (3) | CS 441G (3) |
| CS 450G (3) | CS 450G (3) |
| CS 463G (3) | CS 460G (3) |
| Any other CS class at the 300-level or above (3) | CS 463G (3) |
| Subtotal: CS Electives (9) | Subtotal: CS Electives (15) |
| Technical Electives | Technical Electives |
| Choose 12 credit hours of the following: | Choose 12 credit hours of the following: |
| MA 214 Calculus IV or any 300 -level or higher | MA 214 Calculus IV or any 300-level or higher |
| classes selected from computer science, electrical | classes selected from computer science, electrical |
| engineering, mathematics, or the College or Business | engineering, mathematics, the College or Business |
| and Economics | and Economics, or by advisor's approval |
| Subtotal: Technical Electives (12) | Subtotal: Technical Electives (12) |
| Electives (Non-Technical and Free Electives) | Electives (Non-Technical and Free Electives) |
| Two courses must be in areas other than computer | At least one course must be in areas other than |
| science, science, engineering, or mathematics. Any | computer science, science, engineering, or |
| remaining electives should be selected to meet the | mathematics. Any remaining electives should be |
| minimum total of 128 hours required for graduation | selected to meet the minimum total of 128 hours required for graduation |
| Subtotal: Electives (minimum of 6 ) | Subtotal: Electives (minimum of 10 ) |
| TOTAL HOURS 128 | TOTAL HOURS 128 |

## CHANGE UNDERGRADUATE PROGRAM FORM

8. Does the pgm require a minor AND does the proposed change affect the required-minor? $\square \mathrm{N} / \mathrm{A} \square \square$. Yes $\triangle$ No If "Yes," indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
|  | $\vdots$ |

9. Does the proposed change affect any option(s)? If "Yes," inḍicate current courses and proposed changes below, including credit hours, and also specialties and subspecialties, if any.

| Current | Proposed |
| :--- | :--- |
|  |  |

10. Does the change affect pgm requirements for number of credit hrs outside the major subject in a related field?
If so, indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
| - |  |

11. Does the change affect pgm requirements for technical or professional support electives?

If so, indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
| CS Electives (9), Technical Electives (12) | CS Electives (15), Technical Electives (12) |

12. Does the change affect a minimum number of free credit hours or support electives? $\triangle$ Yes $\square$ No

If "Yes," indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
| Electives (Non-Technical and Free Electives) (6) | Electives (Non-Technical and Free Electives) (10) |

## 13. Summary of changes in required credit hours:

|  | - Current | Proposed |
| :---: | :---: | :---: |
| a. Credit Hours of Premajor or Preprofessional Courses: | 31 | : 39 |
| b. Credit Hours of Major's Requirements: | - 39 | 30 |
| c. Credit Hours for Required Minor: | N/A | $N / A$ |
| d. Credit Hours Needed for a Specific Option: | N/A | $N / A$ |
| e. Credit Hours Outside of Major Subject in Related Field: | N/A | $N / A$ |
| f. Credit Hours in Technical or Professional Support Electives: | $\underline{21}$ | $\underline{27}$ |
| g. Minimum Credit Hours of Free/Supportive Electives: | 6 | 10 |
| h. Total Credit Hours Required by Level: 100 | 21 | 23 |
| 200: | 24 | 26 |
| 300: | 12 | 12+electives |
| 1 400-500: | 6 | 6+electives |
| i. Total Credit Hours Required for Graduation: | 128 | 128 (including |

## CHANGE UNDERGRADUATE PROGRAM FORM

|  |  | $\frac{\text { Electives, }}{}$Core |
| :--- | :--- | :--- |

14. Rationale for Change(s) - if rationale involves accreditation requirements, please include specific references to that.

The Department of Computer Science is revising its undergraduate program to incorporate the college's new first-year student common experience. The proposed curricular changes include the addition of EGR 101, 102 and 103, change from STA 281 to STA 381, the addition of MA 322 as an option to CS/MA 321, and the elimination of PHY 232/242 and CS/EE 380. The curriculum is restructured to include new Computer Science courses that reflect new trends and needs of CS graduates. In particular, the number of Computer Science Electives is increased from 9 to 15 credit hours to accomodate the growing breadth and depth in CS areas. The total number of credit hours will remain the same as with the current program. The new courses CS 270, CS 371, CS 498 have been already approved by the Undergraduate Council.
15. List below the typical semester by semester program for the major. If multiple options are available, attach a separate sheet for each option.

| YEAR 1-FALL: <br> (e.g. "BIO 103; 3 credits") | CIS/WRD 110 (3) <br> EGR 101 (1) <br> EGR 102 (2) <br> MA 113 (4) <br> CHE 105 (4) | YEAR 1-SPRING: |  |
| :---: | :---: | :---: | :---: |
| YEAR 2 - FALL : |  | YEAR 2 - SPRING: | $\frac{\operatorname{CS~270(3)}}{\operatorname{CS} 315(3)}$ <br> Technical Elective (3) UK Core (3) Science Elective (3) |
| YEAR 3 - FALL: | CS/MA 321 or MA 322 (3) CS 371 (3) CS Elective (3) CS Elective (3) STA 381 (3) | YEAR 3 -SPRING: | CS 375 (3) <br> CSElective (3) <br> CSElective (3) <br> Technical Elective (3) <br> UK Core (3) <br> Natural Science Elective (3) |
| YEAR 4 - FALL: | CS 498G (3) CS Elective (3) Technical Elective (3) UK Core (3) Free Elective (4) | YEAR 4 - SPRING: | CS 499 (3) <br> CSElective (3) <br> Non-Technical Elective (3) <br> Technical Elective (3) <br> Free Elective (3) |

## CHANGE UNDERGRADUATE PROGRAM FORM

## Signature Routing Log

## General Information:

Current Degree Title and Major Name: Bachelor of Science in Computer Science
Proposal Contact Person Name: Jerzy W. Jaromczyk Phone: 257-1186 Email: jurek@cs.uky.edu
INSTRUCTIONS:
Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

## Internal College Approvals and Course Cross-listing Approvals:

| Reviewing Group | Date Approved | Contact Person (name/phone/email) | Signature |
| :---: | :---: | :---: | :---: |
| CS Faculty | $30 \mathrm{sep}+20 / 5$ | W. Brent Seales / 7-3063 / seales@uky.edu | Lillinith |
| CoEFaculty | $10-22-15$ | umberly anderson 78004 / Kimberly anderson | $\ln w C$ |
|  |  | / / | 0 |
|  |  | 11 |  |
|  |  | 11 |  |

## External-to-College Approvals:

| Council | Date <br> Approved | Signature | Approval of <br> Revision |
| :---: | :---: | :---: | :---: |
| Undergraduate Council | $12 / 15 / 15$ | Joanie Ett-Mims |  |
| Graduate Council |  |  |  |
| Health Care Colleges Council |  |  |  |
| Senate Council Approval |  | University Senate Approval |  |

## Comments:

[^24]
## Computer Science

Engineering Standing

Current Requirements:

Completion of the following courses with a grade-point average of at least 2.50: CS 100, CS 115, CS 215, CS 275, CIS/WRD 110, MA 113, MA 114, PHY 231, PHY 241.

Proposed Requirements:

Completion of the following courses with a grade-point average of at least 2.50: EGR 102, CS 215, CS 275, CIS/WRD 110, MA 113, MA 114, PHY 231, PHY 241.

| From: | Meier, Mark |
| :--- | :--- |
| Sent: | Friday, September 25,2015 2:36 PM |
| To: | Lumpp, Janet K |
| Cc: | Meier, Mark; Selegue, J P; Brandenburg, Barbara J; Hedge, Jesse |
| Subject: | Re: Enrollment changes due College of Engineering Curriculum Changes |

Dr. Lumpp. Thank you for your message. I am now aware of the proposed change to require CHE 105 for students in the Computer Science degree program.

Mark S. Meier<br>Chair, Department of Chemistry<br>meier@uky.edu<br>859 257-7082

On Sep 24, 2015, at 3:14 PM, Lumpp, Janet K [jklumpp@uky.edu](mailto:jklumpp@uky.edu) wrote:
Dr. Meier,
The degree programs in the College of Engineering are all proposing undergraduate Curriculum Changes as a result of new common First-Year Engineering courses and other departmental initiatives. I am writing to make you aware of the changes that will affect CHE 105 no earlier than the Fall 2016 semester. As part of the proposal package, we need to include a reply from you acknowledging that you are aware of the changes that will impact enrollment in this course.

CHE 105 will be required for BS degrees in Computer Science
With the addition of Computer Science, all nine degree programs now require CHE 105 and are recommending the course for first semester students enrolling in the College of Engineering. No other changes are proposed for the laboratories or additional chemistry lecture courses.

Please reply all at your earliest convenience.
Thanks,
Janet
--
Dr. Janet K. Lumpp - University of Kentucky
Director, First-Year Engineering Program
Professor, Electrical \& Computer Engineering
email: jklumpp@uky.edu
phone: 859-257-4985

## Brandenburg, Barbara J

| From: | Sumit Das [chair@pa.uky.edu](mailto:chair@pa.uky.edu) |
| :--- | :--- |
| Sent: | Monday, September 28, 2015 11:29 AM |
| To: | Lumpp, Janet K; DAS, SUMIT R |
| Cc: | Anderson, Kimberly; Brandenburg, Barbara J |
| Subject: | Re: Enrollment changes due College of Engineering Curriculum Changes |

Dear Dr. Lumpp
Thank you for letting me know about the proposal. This is to let you know that I am aware of the changes in PHY 232, 241 and 242 requirements for engineering students. This will impact the enrollment in these courses significantly.

Best

Sumit Das
On 9/24/2015 3:18 PM, Janet K. Lumpp wrote:
$>$ Dr. Das, $>$
$>$ The degree programs in the College of Engineering are all proposing > undergraduate Curriculum Changes as a result of new common First-Year $>$ Engineering courses and other departmental initiatives. I am writing $>$ to make you aware of the changes that will affect several Physics $>$ courses no earlier than the Fall 2016 semester. As part of the $>$ proposal package, we need to include a reply from you acknowledging $>$ that you are aware of the changes that will impact enrollment in these $>$ courses.
$>$
>PHY 232 will no longer be required for BS degrees in Computer Science
$>$ PHY 241 will no longer be required for the BS degree in Chemical
$>$ Engineering PHY 242 will no longer be required for BS degrees in
$>$ Computer Science
$>$
> Please reply all at your earliest convenience.
$>$ Thanks,
$>$ Janet
$>$
--
Sumit R. Das
Professor and Chair
Department of Physics and Astronomy
University of Kentucky
Lexington, KY 40506
Phone : 859-257-1328

Brandenburg, Barbara 』

|  |  |
| :--- | :--- |
| From: | Brown, Russell |
| Sent: | Thursday, September 24, 2015 9:57 PM |
| To: | Lumpp, Janet K |
| Cc: | Anderson, Kimberly; Brandenburg, Barbara J |
| Subject: | Re: Enrollment changes due College of Engineering Curriculum Changes |

Thanks for your message. By this email, I acknowledge that the Department of Mathematics is aware of these changes in requirements in the College of Engineering and will do our best to adjust our course offerings to accommodate Engineering students.

I would appreciate a notification when the changes are approved so that we will know what to expect during registration.

Sincerely,
Russell Brown
Chair of Math
2015-09-24 15:27 GMT-04:00 Janet K. Lumpp [jklumpp@uky.edu](mailto:jklumpp@uky.edu):
Dr. Brown,
The degree programs in the College of Engineering are all proposing undergraduate Curriculum Changes as a result of new common First-Year Engineering courses and other departmental initiatives. I am writing to make you aware of the changes that will affect several Mathematics courses no earlier than the Fall 2016 semester. As part of the proposal package, we need to include a reply from you acknowledging that you are aware of the changes that will impact enrollment in these courses.

MA 320 will be an optional course (with STA 381) for the BS degree in Electrical Engineering MA 322 will be an optional course (with CS 321) for the BS degree in Computer Science

Please reply all at your earliest convenience.
Thanks,
Janet

Dr. Janet K. Lumpp - University of Kentucky
Director, First-Year Engineering Program
Professor, Electrical \& Computer Engineering email: jklumpp@uky.edu
phone: $\quad$ 859-257-4985

## Brandenburg, Barbara J

| From: | Holloway, Lawrence E |
| :--- | :--- |
| Sent: | Tuesday, September 29, 2015' 9:20 PM |
| To: | Lumpp, Janet K |
| Cc: | Anderson, Kimberly; Brandenburg, Barbara J; Smith, William T; Lumpp, James E; 'Hank |
|  | Dietz'; danielle green-hinkle |
| Subject: | RE: Enrollment changes due College of Engineering Curriculum Changes |

Janet,
I am replying acknowledging your notification that EE/CS380 will no longer be required by BS-CS. The department will plan future course scheduling offerings accordingly.

I am copying Hank Dietz, the instructor, so that he is aware of this. I am also copying Bill Smith as he is responsible for the class scheduling in our department.
-Larry Holloway
------------------.-------------------- Larry Holloway Chair, Department of Electrical and Computer Engineering Director, Power and Energy Institute of Kentucky TVA Professor of Electrical and Computer Engineering University of Kentucky, Lexington, KY 40506. USA
phone: 859-323-8523
ECE main phone: 859-257-8042
email: holloway@uky.edu
------Original Message--.....
From: Lumpp, Janet K
Sent: Tuesday, September 29, 2015 2:38 PM
To: Holloway, Lawrence E [larry.holloway@uky.edu](mailto:larry.holloway@uky.edu)
Cc: Lumpp, Janet K [jklumpp@uky.edu](mailto:jklumpp@uky.edu); Anderson, Kimberly [kimberly.anderson@uky.edu](mailto:kimberly.anderson@uky.edu); Brandenburg, Barbara J [barbara.brandenburg@uky.edu](mailto:barbara.brandenburg@uky.edu)
Subject: Enrollment changes due College of Engineering Curriculum Changes
Dr. Holloway,
As you know, the degree programs in the College of Engineering are all proposing undergraduate Curriculum Changes as a result of new common First-Year Engineering courses and other departmental initiatives. I am writing to make you aware of the changes that will affect EE380 no earlier than the Fall 2016 semester. As part of the proposal package, we need to include a reply from you acknowledging that you are aware of the changes that will impact enrollment in this course.

EE/CS380 will no longer be required for the BS degree in Computer Science

Please reply all at your earliest convenience.
Thanks,
Janet

Dr. Janet K. Lumpp - University of Kentucky

Subject: RE: Changes to Statistic UK Core Requirement - Please respond to this one.
Date: Thursday, February 11, 2016 at 2:57:26 PM Eastern Standard Time
From: Stromberg, Arnold
To: Anderson, Kimberly, Rayens, William S
CC: Lumpp, Janet K
We approve of these changes.

Arnold J. Stromberg
Professor and Chair
Department of Statistics
University of Kentucky
313 Multidisciplinary Science Building
725 Rose Street
Lexington, KY 40536-0082
Phone: 859-257-6115
Fax: 859-323-1973

From: Anderson, Kimberly
Sent: Thursday, February 11, 2016 2:41 PM
To: Rayens, William S; Stromberg, Arnold
Cc: Lumpp, Janet K; Anderson, Kimberly
Subject: Changes to Statistic UK Core Requirement - Please respond to this one.
Hi Arny and Bill
Back in October, Janet Lumpp sent you an email regarding our changes to the Engineering curricula and I see where Arny responded saying that you are aware of the changes and will plan accordingly. We are now being told by the Senate Council that we need a more specific memo from you. As part of our curricular changes, we have 4 programs; Chemical Engineering, Materials Engineering, Electrical Engineering, and Computer Science who have made a change in their curricula that indicates that students are now REQUIRED to take STA 381 for the UK Core Statical Inferential Reasoning. Specifically, the changes are as follow;

Chemical Engineering: Changing UK Core Statical Inferential Reasoning from STAT 210 to STA 381
Materials Engineering: Changing UK Core Statical Inferential Reasoning from STAT 210 to STA 381

Electrical Engineering: Changing UK Core Statical Inferential Reasoning from "Choose one course from approved list" to STA 381
Computer Science: Changing UK Core Statical Inferential Reasoning from "Choose one course from approved list" to STA 381

If you are ok with these changes, please respond back and say you approve.
Thank you!
Kim

Dr. Kimberly Anderson, Associate Dean for Administration and Academic Affairs
Professor, Chemical Engineering
College of Engineering
University of Kentucky
371 Ralph G Anderson Building | Lexington, KY 40506-0030 | office 859.257 .1864 | fax 859.257 .5727
email kimberly.anderson@uky.edul web http://www.engr.uky.edu

| From: | Lumpp, Janet K |
| :--- | :--- |
| Sent: | Thursday, October 01, $20154: 43 \mathrm{PM}$ |
| To: | Brandenburg, Barbara J |
| Cc: | Lumpp, Janet K |
| Subject: | Fwd: Re: Enrollment changes due College of Engineering Curriculum Changes |

---u----.. Forwarded Message --------
Subject:Re: Enrollment changes due College of Engineering Curriculum Changes
Date:Thu, 1 Oct 2015 16:33:25-0400
From:Meier, Mark [mark.meier@uky.edu](mailto:mark.meier@uky.edu)
To:Lumpp, Janet K [jklumpp@uky.edu](mailto:jklumpp@uky.edu)
CC:Selegue, J P [selegue@uky.edu](mailto:selegue@uky.edu), French, April N [april.french@uky.edu](mailto:april.french@uky.edu)

Hi Janet. I acknowledge that we have been informed of the proposed change that would remove the CHE 107 requirement for the BS in Mining Engineering and make CHE 111 optional.

Mark S. Meier
Chair, Department of Chemistry meier@uky.edu
859 257-7082

On Oct 1, 2015, at 4:18 PM, Lumpp, Janet K [jklumpp@uky.edu](mailto:jklumpp@uky.edu) wrote:
I missed another change from Mining Engineering. Please acknowledge again.
CHE 107 will no longer be required for the BS in Mining Engineering
CHE 111 will be optional for the BS in Mining Engineering, it was not previously required.
Thanks,
Janet
On 9/25/2015 2:36 PM, Meier, Mark wrote:
Dr. Lumpp. Thank you for your message. I am now aware of the proposed change to require CHE 105 for students in the Computer Science degree program.

Mark S. Meier
Chair, Department of Chemistry
meier@uky.edu
859 257-7082

> On Sep 24, 2015, at 3:14 PM, Lumpp, Janet K [jklumpp@uky.edu](mailto:jklumpp@uky.edu) wrote:

Dr. Meier,

The degree programs in the College of Engineering are all proposing undergraduate Curriculum Changes as a result of new common First-Year Engineering courses and other departmental initiatives. I am writing to make you aware of the changes that will affect CHE 105 no earlier than the Fall 2016 semester. As part of the proposal package, we need to include a reply from you acknowledging that you are aware of the changes that will impact enrollment in this course.

CHE 105 will be required for BS degrees in Computer Science
With the addition of Computer Science, all nine degree programs now require CHE 105 and are recommending the course for first semester students enrolling in the College of Engineering. No other changes are proposed for the laboratories or additional chemistry lecture courses.

Please reply all at your earliest convenience.
Thanks, Janet
--
Dr. Janet K. Lumpp - University of Kentucky
Director, First-Year Engineering Program
Professor, Electrical \& Computer Engineering email: jklumpp@uky.edu phone: 859-257-4985

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Dr. Janet K. Lumpp - University of Kentucky
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Director, First-Year Engineering Program
Professor, Electrical \& Computer Engineering
email: jklumpp@uky.edu
phone: 859-257-4985

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1. General Information


## 2. General Education Curriculum for this Program:

The new General Education curriculum is comprised of the equivalent of 30 credit hours of course work. There are, however, some courses that exceed 3 credits \& this would result in more than 30 credits in some majors.

- There is no foreign language requirement for the new Gen Ed curriculum.
- There is no General Education Electives requirement.
Please list the courses/credit hours currently used to fulfill the University Studies/General Education curriculum:
Intellectual Inquiry in Arts and Creativity: EE 101 (3)
Intellectual Inquiry in the Humanities: Choose one course from approved list (3)
Intellectual Inquiry in the Social Sciences: Choose one course from approved list (3)
Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences: PHY 231 (4) and PHY 241 (1)
Composition and Communication I: CIS/WRD 110 (3)
Composition and Communication II: CIS/WRD 111 (3)
Quantitative Foundations: MA 113 (4)
Statistical Inferential Reasoning: Choose one course from approved list (3)
Community, Culture and Citizenship: Choose one course from approved list (3)
Global Dynamics: Choose one course from approved list (3)

Please identify below the suggested courses/credit hours to fulfill the General Education curriculum.

| General Education Area | Course | Credit Hrs |  |
| :--- | :---: | :---: | :---: |
| I. Intellectual Inquiry (one course in each area) |  |  |  |
|  | Arts and Creativity | EGR 101, EGR 103 | 3 |
|  | Humanities | $\frac{\text { Choose from }}{\text { approved list }}$ | 3 |

[^25]| Social Sciences | Choose from approved list | 3 |
| :---: | :---: | :---: |
| Natural/Physical/Mathematical | PHY 231, PHY 241 | 5 |
| II. Composition and Communication |  |  |
| Composition and Communication I | CIS or WRD 110 | 3 |
| Composition and Communication II | CIS or WRD 111 | 3 |
| III. Quantitative Reasoning (one course in each area) |  |  |
| Quantitative Foundations ${ }^{3}$ | MA 113 | 4 |
| Statistical Inferential Reasoning | $\frac{\text { STA } 210 \text { or }}{\text { STA } 381}$ | 3 |
| IV. Citizenship (one course in each area) |  |  |
| Community, Culture and Citizenship in the USA | Choose from approved list | $\underline{3}$ |
| Global Dynamics | Choose from approved list | $\underline{3}$ |
| Total General Education Hours |  | 33 |

3. Explain whether the proposed changes to the program (as described in sections 4 to 12) involve courses offered by another department/program. Routing Signature Log must include approval by facultv of additional department(s).

The proposed curriculum change includes the addition of EGR 101, 102 and 103, and the elimination of CS 115.
4. Explain how satisfaction of the University Graduation Writing Requirement will be changed.

| Current | Proposed |  |
| :--- | :--- | :--- |
| Standard University course offering. <br> List: | $\square$ Standard University course offering. <br> $\quad$ List: |  |
| $\boxtimes$ Specific course-list: | EE 490 | $\square$ |

5. List any changes to college-level requirements that must be satisfied.

| Current | Proposed |  |
| :---: | :---: | :---: |
| Standard college requirement. List: $\qquad$ | Standard college requirement. List: $\qquad$ |  |
| $\square$ Specific required course - list: | Specific course - list: |  |

6. List pre-major or pre-professional course requirements that will change, including credit hours.

```
Proposed
CIS/WRD 110; 3 credits
CIS/WRRD 111;3 credits
CHE 105;4 credits
MA 113;4 credits
MA 114; 4 credits
MA 213;4 credits
```

[^26]
7. List the major's course requirements that will change, including credit hours.

| Current | Proposed |
| :---: | :---: |
| CS 215; 4 credits | CS 215; 4 credits |
| EE 221; 3 credits |  |
| EE 222; 2 credits |  |
|  | $\downarrow$ EE 223:4 credits |
| EE 360; 3 credits |  |
| EE 380; 3 credits | EE 287:4 credits if |
| EE 415G; 3 credits | EE 415G; 3 credits |
| EE 421G; 3 credits | LEE 421G; 3 credits |
| EE 461G; 3 credits | EE 461G; 3 credits |
| EE 468G; 4 credits | LEE 468G; 4 credits |
| EE 490; 3 credits | LEE 490; 3 credits |
| EE 491; 3 credits | VE 491; 3 credits |
| MA 214; 3 credits | MA 214; 3 credits |
| MA 320;3 credits | : MA 320 or STA 381; 3 credits |
| Choose three of the following lab courses: | Choose two of the following lab courses: |
| EE 281; 2 crodits |  |
| EE 416G; 2 credits | 2EE 416G; 2 credits |
| EE 462G; 2 credits | EE 462G; 2 credits |
| EE 422G; 2 credits | EE 422G; 2 credits. |

8. Does the pgm require a minor AND does the proposed change affect the required minor? $\square$ N/A Yes © No If "Yes," indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
|  |  |

9. Does the proposed change affect any option(s)? If "Yes," indicate current courses and proposed changes below, including credit hours, and also specialties and subspecialties, if any.

| Current | Proposed |
| :--- | :--- |
|  |  |

10. Does the change affect pgm requirements for number of credit hrs outside the major subject in a related field?
if so, indicate current courses and proposed changes below.

## CHANGE UNDERGRADUATE PROGRAM FORM

| Current | Proposed |
| :--- | :--- |
|  |  |

11. Does the change affect pgm requirements for technical or professional support electives? If so, indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
| Engineering Science Elective; 6 credits | Engineering Science Elective; 6 credits |
| Math/Statistics Elective; 3 credits | Math/Statistics Elective; 3 credits |
| Technical Elective; 3 credits | Technical Elective; 6 credits |
| EE Technical Elective; 12 credits | EE Technical Elective; 12 credits |

12. Does the change affect a minimum number of free credit hours or support electives? If "Yes," indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
|  |  |

13. Summary of changes in required credit hours:

|  | Current | Proposed |
| :---: | :---: | :---: |
| a. Credit Hours of Premajor or Preprofessional Courses: | 45 | 46 |
| b. Credit Hours of Major's Requirements: | 46 | 41 |
| c. Credit Hours for Required Minor: |  |  |
| d. Credit Hours Needed for a Specific Option: |  |  |
| e. Credit Hours Outside of Major Subject in Related Field: |  | - |
| f. Credit Hours in Technical or Professional Support Electives: | 24 | $\underline{27}$ |
| g. Minimum Credit Hours of Free/Supportive Electives: | 3 | 3 |
| h. Total Credit Hours Required by Level: | 24 | 24 |
| 200: | 30-32 | 34 |
| 300: | 9 | 3 |
| 400-500: | 23-25 | $\underline{23}$ |
| 1. Total Credit Hours Required for Graduation: | 134 | 131 |

14. Rationale for Change(s) - if rationale involves accreditation requirements, please include specific references to that.

See the attachod cover memo for a detailed description. Incorporation of new First Year Engineering Program course sequence. Combining lecture and associated laboratory courses into one course number. Slight increase in elective courses.
15. List below the typical semester by semester program for the major. If multiple options are available, attach a separate sheet for each option.

| YEAR 1 - FALL: <br> (e.g. "BIO 103; 3 credits") | EGR 101; 1 credit EGR 102; 2 credits MA 113; 4 credits | YEAR 1-SPRING: | $\begin{aligned} & \text { EGR 103; } 2 \text { credits } \\ & \text { MA 114: } 4 \text { credits } \\ & \text { PHY 231; } 4 \text { credits } \end{aligned}$ |
| :---: | :---: | :---: | :---: |

CHANGE UNDERGRADUATE PROGRAM FORM

|  | CHE 105; 4 credits CIS/WRD 110; 3 credits |  | PHY 241; 1 credit CIS/WRD 111; 3 credits UK Core; 3 credits |
| :---: | :---: | :---: | :---: |
| YEAR 2 - FALL : | MA 213: 4 credits PHY 232; 4 credits PHY 242; 1 credit EE 211; 4 credits EE 282; 4 credits | YEAR 2-SPRING: | MA 214; 3 credits EE 223; 4 credits EE287; 4 credits CS 215; 4 credits UK Core: 3 credits |
| YEAR 3 - FALL: | EE 415G; 3 credits EE $421 \mathrm{G} ; 3$ credits <br> Elective EE Labatory; 2 credits EE 461G; 3 credits MA 320/STA 381; 3 credits Technical Elective; 3 credits | YEAR 3 - SPRING: | EE 468G; 4 credits Elective EE Lab; 2 credits Technical Elective; 3 credits Eng/Sci Elective; 3 cred UK Core; 3 credits |
| YEAR 4 - FALL: | EE 490; 3 credits EE Technical Elective; 3 credits EE Technical Elective; 3 credits Math Elective; 3 credits UK Core; 3 credits | YEAR 4 -SPRING: | EE 491; 3 credits EE Technical Elective; 3 credit EE Technical Elective; 3 credit Eng/Sci Elective; 3 credits Supportive Elective; 3 credits UK Core; 3 credits |

## Signature Routing Log

## General Information:

Current Degree Title and Major Name: Bachelor of Science in Electrical Engineering, Electrical Engineering Proposal Contact Person Name: William T. Smith

Phone: 257-1009

Email:
william.smith@uky.edu

## INSTRUCTIONS:

Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact-person-for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:

| Reviewing Group | Date Approved | Contact Person (name/phone/email) | Signature |
| :---: | :---: | :---: | :---: |
| ECE Faculty | 9/29/15 | Lawrence Holloway / 3-8523 / larry.holloway@uky.edu |  |
| COEFAculty | 10/22/15 | Kimberly Anderson $17-1864$ k kuky eny andu | $h^{\prime}$ |
|  |  | 11 |  |
|  |  | 11 |  |
|  |  | 11 |  |

## External-to-College Approvals:

| Council | Date <br> Approved | Signature | Approval of <br> Revision |
| :---: | :---: | :---: | :---: | :---: |
| Undergraduate Council | $12 / 15 / 15$ |  |  |
| Graduate Council |  |  |  |
| Health Care Colleges Council Ett-Mims |  |  |  |
| Senate Council Approval |  |  |  |

Comments:

[^27]
## SUMMARY OF CHANGES IN THE ELECTRICAL ENGINEERING CURRICULUM

## 1. Incorporation of the First Year Experience into the EE curriculum

2. Linking of lecture/lab material at the sophomore level to emphasize hands-on. Those changes are: EE 221 (3 hours) + EE 222 ( 2 hours) = EE 223 (4 hours); EE 280 ( 3 hours) + EE 281 ( 2 hours, formerly optional) = EE 282 ( 4 hours). There is an additional change in a required computer course. EE 380 (3 hours, now optional) is replaced with EE 287 ( 4 hours, including a lab component in sophomore year). NOTE: EE is adding lab components to lectures (in EE 223, EE 383, and EE 287) but the overall number of labs/lecture will be reduced to follow the net reduction in credit hours and to avoid overloading the students with labs in the sophomore year. Effectively, there will be a slight overall reduction in the number of required EE lab contact hours in the total curriculum.
3. EE 360 is no longer required for EE students. The material can be taken via the technical elective or an upper level EE technical elective. Note that there is an extra technical elective in the junior year to allow for that option.
4. Adding STA 381 as an option to MA 320 for the EE "probability" requirement.
5. In the Bulletin, the admission to the EE major, Engineering Standing, will be slightly modified. Attached is the updated wording:

Completion of a minimum of 35 semester hours acceptable towards the degree in engineering with a minimum cumulative grade-point average of 2.50. Completion of MA 113, MA 114, MA 213, PHY 231, CHE 105, and CIS/WRD 110 with a minimum cumulative GPA of 2.50 in these courses. Completion of EE 211 and EE 282 with passing grades. University repeat options may be utilized as appropriate. Students who do not meet these GPA requirements may request consideration based upon departmental review if the first two GPAs are 2.25 or greater and they receive a C or better in both EE 211 and EE 282 .



## Brandenburg, Barbara J

## Subject:

FW: Re: Enrollment changes due College of Engineering Curriculum Changes

Janet,
Thank you for making me aware of the impact of these changes.
I have discussed this with my Director of Undergraduate students Jurek Jaromczyk and with my faculty and we understand that these changes will have impact on the enrollment in our courses.
Best,
Brent

On Thu, Sep 24, 2015 at 12:06 PM, Janet K. Lumpp [iklumpp@uky.edu](mailto:iklumpp@uky.edu) wrote:
Dr. Seales,
As you know, the degree programs in the College of Engineering are all proposing undergraduate Curriculum Changes as a result of the First-Year Engineering courses and other departmental initiatives. I am writing to make you aware of the changes that will affect several Computer Science courses no earlier than the Fall 2016 semester. As part of the proposal package, we need to include a reply from you acknowledging that you are aware of the changes that will impact enrollment in these courses.

CS 270 will be required for BS degrees in Computer Engineering
CS 115 will no longer be required for BS degrees in Computer Engineering and Electrical Engineering
CS 221 will no longer be required for BS degrees in Biosystems Engineering, Civil Engineering, Materials Engineering, Mechanical Engineering and Mining Engineering
CS 441 will no longer be required for BS degrees in Computer Engineering
CS 470 will no longer be required for BS degrees in Computer Engineering
Please reply all at your earliest convenience.
Thanks,
Janet
--
Dr. Janet K. Lumpp - University of Kentucky
Director, First-Year Engineering Program
Professor, Electrical \& Computer Engineering
email: jklumpp@uky.edu
phone: 859-257-4985

CURRENT: Completion of a minimum of 35 semester hours acceptable towards the degree in engineering with a minimum cumulative grade-point average of 2.50 . Completion of MA 113, MA 114, MA 213, PHY 231, CHE 105, and CIS/WRD 110 with a minimum cumulative GPA of 2.50 in these courses. Completion of EE 211 and EE 280 with passing grades. University repeat options may be utilized as appropriate. In addition, the Electrical and Computer Engineering Department will not permit a third admission into any of these courses. Students who do not meet these GPA requirements may request consideration based upon departmental review if the first two GPAs are 2.25 or greater and they receive a C or better in both EE 211 and EE 280.

PROPOSED: Completion of a minimum of 35 semester hours acceptable towards the degree in engineering with a minimum cumulative grade-point average of 2.50 . Completion of MA 113, MA 114, MA 213, PHY 231, CHE 105, and CIS/WRD 110 with a minimum cumulative GPA of 2.50 in these courses. Completion of EE 211 and EE 282 with passing grades. University repeat options may be utilized as appropriate. In addition, the Electrical and Computer Engineering Department will not permit a third admission into any of these courses. Students who do not meet these GPA requirements may request consideration based upon departmental review if the first two GPAs are 2.25 or greater and they receive a C or better in both EE 211 and EE 282.

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## 1. General Information



## 2. General Education Curriculum for this Program:

The new General Education curriculum is comprised of the equivalent of 30 credit hours of course work. There are, however, some courses that exceed 3 credits \& this would result in more than 30 credits in some majors.

- There is no foreign language requirement for the new Gen Ed curriculum.
- There is no General Education Electives requirement.

Please list the courses/credit hours currently used to fulfill the University Studies/General Education curriculum: Intellectual Inquiry in Arts and Creativity: Choose one course from approved list [3] , Intellectual Inquiry in the Humanities: Choose one course from approved list [3] Intellectual Inquiry in the Social Sciences: Choose one course from approved list [3] Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences: CHE 105 [4] and CHE 111 [1]
Composition and Communication I: CIS/WRD 110 [3]
Composition and Communication II: CIS/WRD 111 [3]
Quantitative Foundations: MA 113 [4]
Statistical Inferential Reasoning: STA 210 [3]
Community, Culture and Citizenship in the USA: Choose one course from approved list [3]
Global Dynamics: Choose one course from approved list [3]

| Please identify below the suggested courses/credit hours to fulfill the General Education curriculum. |  |  |
| :--- | :---: | :---: |
| General Education Area | Course | Credit Hrs |

[^28]| 1. Intellectual Inquiry (one course in each area) |  |  |
| :---: | :---: | :---: |
| Arts and Creativity | choose from list | $\underline{3}$ |
| Humanities | choose from list | $\underline{3}$ |
| Social Sciences | choose from list | $\underline{3}$ |
| Natural/Physical/Mathematical | CHE 105 \& 111 | $\underline{5}$ |
| II. Composition and Communication |  |  |
| Composition and Communication I | CIS or WRD 110 | 3 |
| Composition and Communication II | CIS or WRD 111 | 3 |
| III. Quantitative Reasoning (one course in each area) |  |  |
| Quantitative Foundations ${ }^{3}$. | MA 113 | 4 |
| Statistical Inferential Reasoning | STA 381 | $\underline{3}$ |
| IV. Citizenship (one course in each area) |  |  |
| Community, Culture and Citizenship in the USA | choose from list | $\underline{3}$ |
| Global Dynamics | choose from list | $\underline{3}$ |
| Total General Education Hours |  | $\underline{33}$ |

3. Explain whether the proposed changes to the program (as described in sections 4 to 12) involve courses offered by another department/program. Routing Signature Log must include approval by faculty of additional department(s).

Proposed curriculum includes elimination of CS 221 (First Course in Computer Science for Engineers) and addition of EGR 101, 102 and 103.
STA 381 will now be a required course, replacing STA 210.
4. Explain how satisfaction of the University Graduation Writing Requirement will be changed.

| Current |  | Proposed |  |
| :---: | :---: | :---: | :---: |
| Standard University List: | urse offering. | Standard University course offering. List: $\qquad$ |  |
| \ Specific course-list: | MSE 407 | \ Specific course)-list: | MSE 407 |

5. List any changes to college-level requirements that must be satisfied.

| Current <br> $\square$ Standard college requirement. <br> List: | Proposed <br> $\square$ Standard college requirement. <br> List: |  |
| :--- | :--- | :--- |
| $\square$ Specific required course - list: | $\square$ | $\square$ Specific course - list: |

6. List pre-major or pre-professional course requirements that will change, including credit hours.

| Current | Proposed |
| :--- | :--- |
| CIS/WRD 110 [3] | CIS/WRD 110 [3] <br> CIS/WRD 111 [3] <br> CHE 105 [4] |
| CHRD 111 [3] <br> CHE 105 [4] <br> CHE 107 [3] |  |

[^29]
## CHANGE UNDERGRADUATE PROGRAM FORM

| CHE 111 [1] | CHE 111 [1] |
| :---: | :---: |
| CHE 113 [2] | CHE 113 [2] |
| MA 113 [4] | MA 113 [4] |
| MA 114 [4] | MA 114 [4] |
| MA 213 [4] | MA 213 [4] |
| PHY 231 [4] | PHY 231 [4] |
| PHY 241 [1] | PHY 241 [1] |
|  | MSE 201 [3] |
|  | MSE 202 [1] |
|  | EGR $101[1]$ |
|  | EGR 102 [2] |
|  | EGR 103[2] |
|  | EM 221 [3] |

7. List the major's course requirements that will change, including credit hours.

8. Does the pgm require a minor AND does the proposed change affect the required minor? $\triangle \mathrm{N} / \mathrm{A} \quad \square$ Yes $\square$ No If "Yes," indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
|  |  |

## CHANGE UNDERGRADUATE PROGRAM FORM

9. Does the proposed change affect any option(s)? No If "Yes," indicate current courses and proposed changes below, including credit hours, and also specialties and subspecialties, if any.

| Current | Proposed |
| :--- | :--- |
|  |  |

10. Does the change affect pgm requirements for number of credit hrs outside the major subject in a related field?
If so, indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |

11. Does the change affect pgm requirements for technical or professional support electives? . $\square$ Yes $\boxtimes$ No If so, indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
|  |  |

12. Does the change affect a minimum number of free credit hours or support electives? If "Yes," indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- | :--- |
|  |  |

13. Summary of changes in required credit hours:

|  | Current | Proposed |
| :---: | :---: | :---: |
| a. Credit Hours of Premajor or Preprofessional Courses: | 36 | 45 |
| b. Credit Hours of Major's Requirements: | 68 | 64 |
| c. Credit Hours for Required Minor: | N/A | N/A |
| d. Credit Hours Needed for a Specific Option: | N/A | N/A |
| e. Credit Hours Outside of Major Subject in Related Field: | N/A | N/A |
| f. Credit Hours in Technical or Professional Support Electives: | 6 | 6 |
| g. Minimum Credit Hours of Free/Supportive Electives: | $\underline{3}$ | 3 |
| h. Total Credit Hours Required by Level: : 100 : | $\underline{25}$ | 29 |
| 200: | 34 | 29 |
| 300: | 15 | 18 |
| 400-500: | $\underline{33}$ | $\underline{33}$ |
| i. Total Credit Hours Required for Graduation: | $131^{*}$ <br> Credithrs. by level do not include UK core or elective requirements where level is | 130* |

$\square$
14. Rationale for Change(s) - if rationale involves accreditation requirements, please include specific references to that.

See attached cover memo for a detailed description. The proposed changes include adding the new College of Engineering first-year engineering courses EGR 101, 102 and 103, removing MSE 101 and CS 221, and replacing STA 210 with STA 381.
15. List below the typical semester by semester program for the major. If multiple options are available, attach a separate sheet for each option.

| YEAR 1-FALL: <br> (e.g. "BIO 103; 3 credits") |  | YEAR 1-SPRING: |  |
| :---: | :---: | :---: | :---: |
| YEAR 2 - FALL : |  | YEAR 2-SPRING: |  |
| YEAR 3 - FALL: | $\begin{aligned} & \text { MSE 401G [3] } \\ & \text { MSE 404G [3] } \\ & \hline \text { CME 200 [3] } \\ & \text { EM 302 [3] } \\ & \text { STA 381[3] } \\ & \text { UK Core [3] } \\ & \hline \end{aligned}$ | YEAR 3 -SPRING: | $\begin{aligned} & \text { MSE 402G [3] } \\ & \begin{array}{l} \text { MSE 403G [3] } \\ \text { MSE 407 [3] } \\ \text { MSE } 535[3] \\ \hline \text { PHY } 361[3] \end{array} \end{aligned}$ |
| YEAR 4 - FALL: | MSE 408 [3] <br> MSE 436 [3] <br> MSE 585 [3] <br> EE 305 [3] <br> MSE Elective [3] <br> UK Core [3] | YEAR 4-SPRING: | $\begin{aligned} & \frac{\frac{\text { MSE } 480[3]}{\text { MSE } 538 ~[3]}}{\text { MSE Elective [3] }} \\ & \text { Supportive Elective [3] } \\ & \text { UK Core [3] } \end{aligned}$ |

## Signature Routing Log

## General Information:

Current Degree Title and Major Name: Bachelor of Science in Materials Engineering
Proposal Contact Person Name: T. John Balk
Phone: 257-4582 Email: john.balk@uky.edu

INSTRUCTIONS:
Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:


## External-to-College Approvals:

| Council <br> Undergraduate Council | Date Approved 12/15/15 | Signature <br> Joanie Ett-Mims | Approval of Revision ${ }^{4}$ |
| :---: | :---: | :---: | :---: |
| Graduate Council |  |  |  |
| Health Care Colleges Council |  |  |  |
| Senate Council Approval |  | rsity Senate Approval |  |

Comments:

[^30]Fall 2015

# PROPOSED CHANGE IN UNDERGRADUATE PROGRAM BACHELOR OF SCIENCE IN MATERIALS ENGINEERING SUBMITTED BY: PROF. JOHN BALK 

## ENGINEERING STANDING REQUIREMENTS

## Current Requirements:

Materials Engineering: Completion of CHE 105, CHE 107, CHE 111, CHE 113, MA 113, MA 114, MA 213, PHY 231, PHY 241, CIS/WRD 110 with a minimum cumulative grade-point average of 2.50 in these courses. Completion of MSE 201 with a grade of C or better. University repeat options may be applied as appropriate.

## Proposed Requirements:

Materials' Engineering: Completion of CHE 105, CHE 107, CHE 111, CHE 113, MA 113, MA 114, MA 213, PHY 231, PHY 241, CIS/WRD 110 with a minimum cumulative grade-point average of 2.50 in these courses. Completion of MSE 201 with a grade of C or better. University repeat options may be applied as appropriate.
(no change)

# PROPOSED CHANGE IN UNDERGRADUATE PROGRAM BACHELOR OF SCIENCE IN MATERIALS ENGINEERING SUBMITTED BY: PROF. T. JOHN BALK 

## OVERVIEW:

The Department of Chemical and Materials Engineering submits proposed curriculum changes to the Bachelor of Science degree in Materials Engineering. The proposed changes have been initiated to incorporate the components of the College of Engineering's first-year sequence, which is comprised of a total of five credits at the 100-level, as follows:

EGR 101 Engineering Exploration I [1 credit]
EGR 102 Fundamentals of Engineering Compúting [2 credits]
EGR 103 Engineering Exploration II [2 credits]
The incorporation of EGR 101, 102 and 103 will result in the elimination of MSE 101 -Materials Engineering, as much of the content in this course will be covered in EGR 101. Similarly, the faculty have elected to remove CS 221 - First Course in Computer Science for Engineers, as this content will be addressed in EGR 102.

Also, STA 381 (Engineering Statistics) will now be a requirement for satisfaction of the UK Core component in Statistical Inferential Reasoning. This will replace the prior requirement of STA 210 (Making Sense of Uncertainty: An Introduction to Statistical Reasoning).

The introduction of the changes outlined above will result in an increase of two credits in the total number of hours required for the BS degree in Materials Engineering, which will increase from 131 hours to 133 hours.

## DETAILS OF THE PROPOSED CHANGES:

Please refer to the proposed (semester-by-semester) course sequence, attached.
The following required courses will be added to the BS materials engineering curriculum:
EGR 101 Engineering Exploration I
EGR 102 Fundamentals of Engineering Computing [2]
EGR 103 Engineering Exploration II
STA 381 Engineering Statistics

The following required courses will be removed from the BS materials engineering curriculum:

$$
\text { MSE } 101 \quad \text { Materials Engineering [1] }
$$

CS 221 First Course in Computer Science for Engineers [2]
STA 210 An Introduction to Statistical Reasoning [3]

## Impact of Proposed Changes on Accreditation:

ABET accreditation requires the following with respect to the curriculum:
The curriculum requirements specify subject areas appropriate to engineering but do not prescribe specific courses. The faculty must ensure that the program curriculum devotes adequate attention and time to each component, consistent with the outcomes and objectives of the program and institution. The professional component must include:
(a) one year of a combination of college level mathematics and basic sciences (some with experimental experience) appropriate to the discipline. Basic sciences are defined as biological, chemical, and physical sciences.
(b) one and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study.
(c) a general education component that complements the technical content of the curriculum and is consistent with the program and institution objectives.

Students must be prepared for engineering practice through a curriculum culminating in a major design experience based on the knowledge and skills acquired in earlier course work and incorporating appropriate engineering standards and multiple realistic constraints.

One year is the lesser of 32 semester hours (or equivalent) or one-fourth of the total credits required for graduation.

The proposed BSMAE curriculum readily satisfies all aspects of the ABET curriculum requirement (re: Table).

|  | Math/Science | Engineering | Gen. Education | Other |
| :--- | :---: | :---: | :---: | :---: |
| ABET Requirement | 32 | 48 | N/A | N/A |
| Current BSMAE <br> Curriculum | 40 | 62 | 24 | 5 |
| Proposed BSMAE <br> Curriculum | 43 | 64 | 21 | 5 |

## Impact of Proposed Changes on Total Credits for BS Materials Engineering Degree:

Current curriculum: 131 credits
Proposed curriculum: 133 credits

## Bachelor of Science In Materials Engineering Curriculum

[Proposed]

| FRESHIMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| First Semester <br> CIS/WRD 110 Comp. and Commun. 1 <br> MA 113 Calculus I <br> EGR 101 Engineering Exploration I <br> EGR 102 Fundamentals of Eng. Computing <br> CHE 105 General College Chemistry I <br> CHE 111 Chemistry Lab I <br> TOTAL HRS | $\begin{gathered} 1 \\ 15 \end{gathered}$ | Second Semester <br> CIS/WRD 111 Comp. and Commun. II <br> MA 114 Calculus II <br> EGR 103 Engineering Exploration II <br> PHY 231 General University Physics I <br> PHY 241 General University Physics Lab I UK Core <br> TOTAL HRS | 3 4 4 2 4 1 3 17 |
| SOPHOMORE YEAR |  |  |  |
| First Semester <br> MSE 201 Materials Science <br> MSE 202 Materials Science Laboratory <br> MA 213 Calculus III <br> CHE 107 General College Chemistry II <br> CHE 113 Chemistry Lab II <br> EM 221 Statics <br> TOTAL HRS | $\begin{gathered} 2 \\ 3 \\ 16 \end{gathered}$ | Second Semester <br> MSE 301 Materials Science II MSE 351 Material Thermodynamics MA 214 Calculus IV PHY 232 General University Physics II CHE 236 Survey of Organic Chemistry TOTAL HRS | 3 3 3 4 3 16 |
| JUNIOR YEAR |  |  |  |
| First Semester <br> MSE 401G Metal and Alloys <br> MSE 404G Polymeric Materials <br> CME 200 Process Principles <br> EM 302 Mechanics of Deformable Solids <br> STA 381 Engineering Statistics <br> UK Core <br> TOTAL HRS | $3$ | Second Semester <br> MSE 402G Electronic Materials \& Processing MSE 403G Ceramic Engineering \& Processing MSE 407 Materials Laboratory 1 MSE 535 Mechanical Properties of Materials PHY 361 . Principles of Modern Physics UK Core TOTAL HRS | 3 3 3 3 3 3 18 |
| SENIOR YEAR |  |  |  |
| First Semester <br> MSE 408. Materials Laboratory II MSE 436 Material Failure Analysis MSE 585 Materials Characterization Techniques EE 305 Electrical Circuits and Electronics MSE Technical Elective UK Core TOTAL HRS | $3$ | Second Semester <br> MSE 480 Materials Design MSE 538 Metals Processing MSE Technical Elective Supportive Elective UK Core TOTAL HRS | 3 3 3 3 3 3 15 |

TOTAL HOURS $=\mathbf{1 3 3}$

## Bachelor of Science In Materials Engineering Curriculum

## [Proposed]

| FRESHMAN YEAR |  |  |  |
| :---: | :---: | :---: | :---: |
| First Semester |  | Second Semester |  |
| CIS/WRD 110 Comp. and Commun. I | 3 | CIS/WRD 111 Comp. and Commun. If | 3 |
| MA 113 Calculus | 4 | MA 114 Calculus II | 4 |
| EGR 101 Engineering Exploration I | 1 | EGR 103 Engineering Exploration II | 2 |
| EGR 102 Fundamentals of Eng. Computing | 2 | PHY 231 General University Physics I | 4 |
| CHE 105 General College Chemistry 1 | 4 | PHY 241 General University Physics Lab I | 1 |
| CHE 111 Chemistry Lab 1 | 1 | UK Core | 3 |
| TOTAL HRS | 15 | TOTAL HRS | 17 |
| SOPHOMORE YEAR |  |  |  |
| First Semester |  | Second Semester |  |
| MSE 201 Materials Science | 3 | MSE 301 Materials Science II | 3 |
| MSE 202 Materials Science Laboratory | 1 | MSE 351 Material Thermodynamics | 3 |
| MA 213 Calculus III | 4 | MA 214 Calculus IV | 3 |
| CHE 107 General College Chemistry II | 3 | PHY 232 General University Physics II | 4 |
| CHE 113 Chemistry Lab II | 2 | CHE 236 Survey of Organic Chemistry | 3 |
| EM 221 Statics | 3 | TOTAL HRS | 16 |
| TOTAL HRS | 16 |  |  |
| JUNIOR YEAR |  |  |  |
| First Semester |  | Second Semester |  |
| MSE 401G Metal and Alloys | 3 | MSE 402G Electronic Materials \& Processing | 3 |
| MSE 404G Polymeric Materials | 3 | MSE 403G Ceramic Engineering \& Processing | 3 |
| CME 200 Process Principles | 3 | MSE 407 Materials Laboratory I | 3 |
| EM 302 Mechanics of Deformable Solids | 3 | MSE 535 Mechanical Properties of Materials | 3 |
| STA 381 Engineering Statistics | 3 | PHY 361 Principles of Modern Physics | 3 |
| UK Core | 3 | TOTAL HRS |  |
| TOTAL HRS | 18 |  | 15 |
| SENIOR YEAR |  |  |  |
| First Semester |  | Second Semester |  |
| MSE 408 Materials Laboratory II | 3 | MSE 480 Materials Design | 3 |
| MSE 436 Material Failure Analysis | 3 | MSE 538 Metals Processing | 3 |
| MSE 585 Materials Characterization Techniques | 3 | MSE Technical Elective | 3 |
| EE 305 Electrical Circuits and Electronics | 3 | Supportive Elective | 3 |
| MSE Technical Elective | 3 | UK Core | 3 |
| UK Core | 3 | TOTAL HRS | 15 |
| TOTAL HRS | 18 |  |  |

## Brandenburg, Barbara J

## Subject:

FW: Re: Enrollment changes due College of Engineering Curriculum Changes

Janet,
Thank you for making me aware of the impact of these changes.
I have discussed this with my Director of Undergraduate students Jurek Jaromczyk and with my faculty and we understand that these changes will have impact on the enrollment in our courses.
Best, Brent

On Thu, Sep 24, 2015 at 12:06 PM, Janet K. Lumpp [jklumpp@uky.edu](mailto:jklumpp@uky.edu) wrote:
Dr. Seales,
As you know, the degree programs in the College of Engineering are all proposing. undergraduate Curriculum Changes as a result of the First-Year Engineering courses and other departmental initiatives. I am writing to make you aware of the changes that will affect several Computer Science courses no earlier than the Fall 2016 semester. As part of the proposal package, we need to include a reply from you acknowledging that you are aware of the changes that will impact enrollment in these courses.

CS 270 will be required for BS degrees in Computer Engineering
CS 115 will no longer be required for BS degrees in Computer Engineering and Electrical Engineering CS 221 will no longer be required for BS degrees in Biosystems Engineering, Civil Engineering, Materials Engineering, Mechanical Engineering and Mining Engineering
CS 441 will no longer be required for BS degrees in Computer Engineering CS 470 will no longer be required for BS degrees in Computer Engineering

Please reply all at your earliest convenience.
Thanks,
Janet
--
Dr. Janet K. Lumpp - University of Kentucky
Director, First-Year Engineering Program
Professor, Electrical \& Computer Engineering
email: jklumpp@uky.edu
phone: 859-257-4985

Subject: RE: Changes to Statistic UK Core Requirement - Please respond to this one.
Date: Thursday, February 11, 2016 at 2:57:26 PM Eastern Standard Time
From: Stromberg, Arnold
To: Anderson, Kimberly, Rayens, William S
CC: Lumpp, Janet K
We approve of these changes.

Amold J. Stromberg<br>Professor and Chair<br>Department of Statistics<br>University of Kentucky<br>313 Multidisciplinary Science Building<br>725 Rose Street<br>Lexington, KY 40536-0082<br>Phone: 859-257-6115<br>Fax: 859-323-1973

From: Anderson, Kimberly
Sent: Thursday, February 11, 2016 2:41 PM
To: Rayens, William S; Stromberg, Arnold
Cc: Lumpp, Janet K; Anderson, Kimberly
Subject: Changes to Statistic UK Core Requirement - Please respond to this one.
Hi Arny and Bill
Back in October, Janet Lumpp sent you an email regarding our changes to the Engineering curricula and I see where Arny responded saying that you are aware of the changes and will plan accordingly. We are now being told by the Senate Council that we need a more specific memo from you. As part of our curricular changes, we have 4 programs; Chemical Engineering, Materials Engineering, Electrical Engineering, and Computer Science who have made a change in their curricula that indicates that students are now REQUIRED to take STA 381 for the UK Core Statical Inferential Reasoning. Specifically, the changes are as follow;

Chemical Engineering: Changing UK Core Statical Inferential Reasoning from STAT 210 to STA 381
Materials Engineering: Changing UK Core Statical Inferential Reasoning from STAT 210 to STA 381

Electrical Engineering: Changing UK Core Statical Inferential Reasoning from "Choose one course from approved list" to STA 381
Computer Science: Changing UK Core Statical Inferential Reasoning from "Choose one course from approved list" to STA 381

If you are ok with these changes, please respond back and say you approve.
Thank you!
Kim

Dr. Kimberly Anderson, Associate Dean for Administration and Academic Affairs
Professor, Chemical Engineering
College of Engineering
University of Kentucky
371 Ralph G Anderson Building | Lexington, KY $40506-0030$ | office 859.257 .1864 | fax 859.257 .5727
email kimberly.anderson@uky.edul. web http://www.engr.uky.edu

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1. General Information


## 2. General Education Curriculum for this Program:

The new General Education curriculum is comprised of the equivalent of 30 credit hours of course work. There are, however, some courses that exceed 3 credits $\&$ this would result in more than 30 credits in some majors.

- There is no foreign language requirement for the new Gen Ed curriculum.
- There is no General Education Electives requirement.
Please list the courses/credit hours currently used to fulfill the University Studles/General Education curriculum:
Intellectual Inquiry in Arts and Creativity: ME 411 (3)
Intellectual Inquiry in the Humanities: Choose one course from approved list (3)
Intellectual Inquiry in the Social Sciences: Choose one course from approved list (3)
Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences: PHY 231 (4) and PHY 241 (1)
Composition and Communication I: CIS/WRD 110 (3)
Composition and Communication II: CIS/WRD 111 (3)
Ouantitative Foundations: MA 113 (4)
Statistical Inferential Reasoning: Choose one course from approved list. Recommended: STA 210 (3) or STA 381 (3)
Community, Culture and Citizenship: Choose one course from approved list (3)
Global Dynamics: Choose one course from approved list (3).

Please identify below the suggested courses/credit hours to fulfill the General Education curriculum.

| General Education Area | Course | Credit Hrs |
| :--- | :--- | :--- |
| 1. Intellectual Inquiry (one course in each area) |  |  |
|  | Arts and Creativity | ME 411 |

[^31]CHANGE UNDERGRADUATE PROGRAM FORM

| Humanities | Choose from list | $\underline{3}$ |
| :---: | :---: | :---: |
| Social Sciences | Choose from list | $\underline{3}$ |
| Natural/Physical/Mathematical | PHY231 \& 241 | $\underline{5}$ |
| II. Composition and Communication |  |  |
| Composition and Communication I | CIS or WRD 110 | 3 |
| Composition and Communication II | CIS or WRD 111 | 3 |
| III. Quantitative Reasoning (one course in each area) |  |  |
| Quantitative Foundations ${ }^{3}$ | MA 113 | $\underline{4}$ |
| Statistical Inferential Reasoning | STA 210 or 381 | $\underline{3}$ |
| IV. Citizenship (one course in each area) |  |  |
| Community, Culture and Citizenship in the USA | Choose from list | $\underline{3}$ |
| Global Dynamics | Choose from list | 3 |
| Total General Education Hours |  | $\underline{33}$ |

3. Explain whether the proposed changes to the program (as described in sections 4 to 12) involve courses offered by another department/program. Routing Signature Log must include approval by faculty of additional department(s).

The proposed curriculum change includes the addition of EGR 101, 102 and 103, and the elimination of CS 221.
4. Explain how satisfaction of the University Graduation Writing Requirement will be changed.

| Current |  | Proposed |  |
| :---: | :---: | :---: | :---: |
| Standard University cour List: | urse offering. | Standard University co List: | urse offering. |
| $\triangle$ Specific course - list: | WRD 204 | 区 Specific course)-list: | WRD 204 |

5. List any changes to college-level requirements that must be satisfied.

| Current |
| :--- | :--- | :--- | :--- |
| Standard college requirement. |
| List: |

6. List pre-major or pre-professional course requirements that will change, including credit hours.
Current

| CIS/WRD 110 (3) |
| :--- |
| CIS/WRD 111 (3) |
| CHE 105 (4) |
| CHE 107 (3) |
| MA 113 (4) |
| MA 114 (4) |
| MA 213 (4) |
| MA 214 (3) |.

Proposed

| CIS/WRD 110 (3) |
| :--- |
| CIS/WRD111(3) |
| CHE 105 (4) |
| CHE 107 (3) |
| $M A 113(4)$ |
| $M A 114 ~(4)$ |
| $M A ~ 213 ~(4) ~$ |
| PHY 231 (4) |

${ }^{3}$ Note that MA 109 is NOT approved as a Quantitative Foundations course. Students in a major requiring calculus will use a calculus course (MA $113,123,137$ or 138) while students not requiring calculus should take MA 111, PHI 120 or another approved course.

| PHY 231 (4) | PHY232 (4) |
| :---: | :---: |
| PHY 232 (4) | DHY 241 (1) |
| PHY 241 (1) | PHY 242 (1) |
| PHY 242 (1) | EGR 101 (1) |
|  | EGR 102 (2) |
|  | KGR 103 (2) |
| - | $\frac{\text { KIE } 205(3)}{X C M 221(3)}$ |

7. List the major's course requirements that will change, including credit hours.

| Current | Proposed |
| :---: | :---: |
| ME 101 (3) | MA 214 (3) |
| ME 151 (3) |  |
| ME 205 (3) |  |
| ME 220 (3) | ME 220 (3) |
| CS 221 (2) | ME 251 (3) |
| EM 302 (3) | EM 302 (3) |
| EM 313 (3) | EM313 (3) |
| EM 221 (3) |  |
| EE 305 (3) | LEE 305 (3) |
| ME 310 (3) | MLE 310 (3) |
| ME 311 (3) | ME 311 (3) |
| ME 321 (3) | ME 321 (3) |
| ME 325 (3) | ME 32.5 (3) |
| ME 330 (3) | ME 330 (3) |
| ME 340 (3) | ME 340 (3) |
| ME 344 (3) | ME 344 (3) |
| ME 411 (3) | ME 411 (3) |
| ME 412 (3) | LGE 412 (3) |
| ME 440 (3) | ME 440 (3) |
| ME 501 (3) | ME 501 (3) |

8. Does the pgm require a minor AND does the proposed change affect the required minor? $\square$ N/A Yes № If "Yes,". indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
|  |  |

9. Does the proposed change affect any option(s)? If "Yes," indicate current courses and proposed changes below, including credit hours, and also specialties and subspecialties, if any.

| Current | Proposed |
| :--- | :--- |
|  |  |

10. Does the change affect pgm requirements for number of credit hrs outside the major subject in a related field? If so, indicate current courses and proposed changes below.

## CHANGE UNDERGRADUATE PROGRAM FORM

| Current |  | Proposed |
| :--- | :--- | :--- |
|  |  |  |

11. Does the change affect pgm requirements for technical or professional support electives? If so, indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
|  |  |

12. Does the change affect a minimum number of free credit hours or support electives? If "Yes," indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
|  |  |

## 13. Summary of changes in required credit hours:


14. Rationale for Change(s) - if rationale involves accreditation requirements, please include specific references to that.

The Department of Mechanical Engineering is revising its undergraduate program to incorporate the college's new first-year student common experience. We are removing ME 101 and CS 221 from our current program, and are replacing them with EGR 101, EGR 102, and EGR 103. The net credit hours will remain the same as with the current program. Additionally, we are replacing ME 151 with ME 251 and are moving the class to later in the curriculum. The new course proposal for ME 251 has been submitted already through eCATS.
15. List below the typical semester by semester program for the major. If multiple options are available, attach a separate sheet for each option.

| YEAR 1-FALL: <br> (e.g. "BIO 103; 3 credits") | EGR 101; 1 credit EGR 102; 2 credits CHE 105; 4 credits MA 113: 4 credits CIS/WRD 110; 3 credits | YEAR 1-SPRING: | EGR 103; 2 credits PIIY 231; 4 credits PHY 241; 1 credit CHE 107 or UK Core; 3 credits |
| :---: | :---: | :---: | :---: |

CHANGE UNDERGRADUATE PROGRAM FORM

|  |  |  | MA 114; 4 credits CIS/WRD 111; 3 credits |
| :---: | :---: | :---: | :---: |
| YEAR 2 - FALL : | PHY 232; 4 credits <br> PHY 2421 credit <br> MA 213; 4 credits <br> UK Core or CHE 107; 3 credits <br> ME 205; 3 credits <br> EM 221; 3 credits | YEAR 2-SPRING: | ME 220; 3 credits ME 251; 3 credits MA 214; 3 credits EM 313; 3 credits UK Core: 3 credits UK Core; 3 credits |
| YEAR 3-FALL: | EM 302; 3 credits EE $305 ; 3$ credits ME 330: 3 credits ME 340; 3 credits WRD 204; 3 credits | YEAR 3 - SPRING: | ME 310; 3 credits ME 321; 3 credits ME 325; 3 credits ME 344; 3 credits Math Elective |
| YEAR 4 - FALL: | ME 4113 credits <br> ME 311; 3 credits <br> ME 440; 3 credits <br> ME 501; 3 credits <br> Technical Elective \#1; 3 credits | YEAR 4 - SPRING: | ME 412; 3 credits <br> Technical Elective \#2; 3 <br> credits <br> Technical Elective \#3; 3 <br> credits <br> Supportive Elective; 3 credits <br> UK Core; 3 credits <br> UK Core; 3 credits |

## Signature Routing Log

## General Information:

Current Degree Title and Major Name: Bachelor of Science in Mechanical Engineering
Proposal Contact Person Name: Dr. Tim Wu Phone: 218-0644 Email: timwu@uky.edu
INSTRUCTIONS:
Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

## Internal College Approvals and Course Cross-listing Approvals:

| Reviewing Group | Date Approved | Contact Person (name/phone/email) | Signature |
| :---: | :---: | :---: | :---: |
| ME Faculty | 09/02/2015 | Michael Renfro / 8-0643 / michael.renfro@uky.edu | Muhav tw hous |
| COEFAMity | $10 / 22115$ | Kimberly /7.1864/ Kimberly. Andexson 17.1844 anderson 0 | $K \rightarrow A N C=$ |
|  |  | $1 /$ |  |
|  |  | $1 /$ |  |
|  |  | 1.1 |  |

## External-to-College Approvals:

| Council | Date <br> Approved | Signature | Approval of $_{\text {Revision }}$ |
| :---: | :---: | :---: | :---: |
| Undergraduate Council | $12 / 15115$ | Joanie Ett-Mims |  |
| Graduate Council |  |  |  |
| Health Care Colleges Council |  |  |  |
| Senate Council Approval |  |  |  |

## Comments:

$\square$

[^32]For new students beginning Fall 2014 and afterward
bachelor of science in mechanical engineering

For new students beginning Fall 2016 and afterward


## CURRENT REQUIREMENTS FOR ENGINEERING STANDING

To earn engineering standing, mechanical engineering students must have completed at least 35 semester credit hours applicable to the degree program with a minimum cumulative GPA of 2.50. In addition, completion of ME 101,WRD/CIS 110,WRD/CIS 111 (or ENG 101 and ENG 102, or ENG 104), CHE 105, MA 113, MA 114, MA 213, PHY 231, PHY 241 with a minimum GPA of 2.50 in these courses.

While a student may exercise up to three official University of Kentucky Repeat Options to improve his/her cumulative grade point average, only one can be used for the subset of classes listed above for the purpose of calculating engineering standing. Written request for exception to the allowed number of repeats should be submitted to the ME Director of Undergraduate Studies.

Note to Transfer Students: Transfer students who have received more than 35 hours transfer credit in the degree program will be considered without the inclusion of ME 101. (In place of ME 101, transfer students will take a fourth technical elective.) Additionally, it is important to note if you receive acceptance of transfer credit for one of the above listed courses, the grades will be used in the calculation of the requisite GPAs necessary for engineering. In no case will an exception be made to the minimum acceptable grade point averages listed above.

## PROPOSED REQUIREMENTS FOR ENGINEERING STANDING

To earn engineering standing, mechanical engineering students must have completed at least 35 semester credit hours applicable to the degree program with a minimum cumulative GPA of 2.50. In addition, completion of EGR 101, EGR 102, EGR 103, WRD/CIS 110,WRD/CIS 111 (or ENG 101 and ENG 102, or ENG 104), CHE 105, MA 113, MA 114, MA 213, PHY 231, PHY 241 with a minimum GPA of 2.50 in these courses.

While a student may exercise up to three official University of Kentucky Repeat Options to improve his/her cumulative grade point average, only one can be used for the subset of classes listed above for the purpose of calculating engineering standing. Written request for exception to the allowed number of repeats should be submitted to the ME Director of Undergraduate Studies.

Note to Transfer Students: Transfer students who have received more than 35 hours transfer credit in the degree program will be considered without the inclusion of EGR 101, EGR 102, and EGR 103. (In place of EGR 102, transfer students can use a CS 115 or CS 221 equivalent. In place of EGR 101 and EGR 103, transfer students will take EGR 111 or a fourth technical elective.) Additionally, it is important to note if you receive acceptance of transfer credit for one of the above listed courses, the grades will be used in the calculation of the requisite GPAs necessary for engineering. In no case will an exception be made to the minimum acceptable grade point averages listed above.

## Brandenburg, Barbara J

Subject:
FW: Re: Enrollment changes due College of Engineering Curriculum Changes

Janet,
Thank you for making me aware of the impact of these changes.
I have discussed this with my Director of Undergraduate students Jurek Jaromczyk and with my faculty and we understand that these changes will have impact on the enrollment in our courses.
Best,
Brent

On Thu, Sep 24, 2015 at 12:06 PM, Janet K. Lumpp [iklumpp@uky.edu](mailto:iklumpp@uky.edu) wrote:
Dr. Seales,
As you know, the degree programs in the College of Engineering are all proposing undergraduate Curriculum Changes as a result of the First-Year Engineering courses and other departmental initiatives. I am writing to make you aware of the changes that will affect several Computer Science courses no earlier than the Fall 2016 semester. As part of the proposal package, we need to include a reply from you acknowledging that you are aware of the changes that will impact enrollment in these courses.

CS 270 will be required for BS degrees in Computer Engineering
CS 115 will no longer be required for BS degrees in Computer Engineering and Electrical Engineering
CS 221 will no longer be required for BS degrees in Biosystems Engineering, Civil Engineering, Materials Engineering, Mechanical Engineering and Mining Engineering
CS 441 will no longer be required for BS degrees in Computer Engineering
CS 470 will no longer be required for BS degrees in Computer Engineering
Please reply all at your earliest convenience.
Thanks,
Janet
--
Dr. Janet K. Lumpp - University of Kentucky
Director, First-Year Engineering Program
Professor, Electrical \& Computer Engineering
email: jklumpp@uky.edu
phone: 859-257-4985

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## 1. General Information

College: Engineering
Current Major Name: Mining Engineering
Current Degree Title: BS in Mining Engineering
Formal Option(s): None
Specialty Field w/in
Formal Option:
Date of Contact with Associate Provost for Academic Administration ${ }^{1}$ : $\quad \underline{9 / 25 / 2015}$
Bulletin (yr \& pgs): $\frac{\underline{2015 / 2016, p p}}{\underline{253-254}} \quad$ CIP Code ${ }^{1}: 14.2101 \quad$ Today's Date: 9/25/2015
Accrediting Agency (if applicable): ABET, Inc. Requested Effective Date: $\boxtimes$ Semester following approval. OR $\square$ Specific Date ${ }^{2}$ : Dept. Contact Person: Joe Sottile

Phone:
257-4616

Email: joseph.sottile@uky.edu

## 2. General Education Curriculum for this Program:

The new General Education curriculum is comprised of the equivalent of 30 credit hours of course work. There are, however, some courses that exceed 3 credits \& this would result in more than 30 credits in some majors.

- There is no foreign language requirement for the new Gen Ed curriculum.
- There is no General Education Electives requirement.

Please list the courses/credit hours currently used to fulfill the University Studies/General Education curriculum: (1) Intellectual Inquiry

Arts and Creativity: MNG 592 (3)
Humanities: select (3)
Social Science: select (3)
Natural/Physical/Mathematical: PHY 231 (4)/PHY 241 (1)
(II) Composition and Communication

Composition and Communication I CIS or WRD 110 (3)
Composition and Communication II: CIS or WRD 111 (3)
(III) Quantitative Reasoning

Quantitative Foundations: MA 113 (4)
Statistical Inferential Reasoning : MNG 335 (3)
(IV) Citizenship

Community, Culture, Citizenship in the USA: select (3)
Global Dynamics: select (3)
Please identify below the suggested courses/credit hours to fulfill the General Education curriculum.

I. Intellectual Inquiry (one course in each area)

[^33]

3. Explain whether the proposed changes to the program (as described in sections 4 to 12 ) involve courses offered by another department/program. Routing Signature Log must include approval by faculty of additional department(s).

Biosystems and Agricultural Engineering will be offering BAE 535 that will be cross-listed as MNG 535.The First-Year Engineering Program changes involve adding EGR 101, 102 and 103, removing CHE 107, CS 221 and EE 305, and giving students the option to take PHY 241 or CHE 111 to fulfill the UK Core Intellectual Inquiry N/P/M.
NOTE; In Item 4 below, MNG 371 fulfils the Graduation Composition and Communication Requirement, (GCCR) not the Graduation Writing Requirement.
4. Explain how satisfaction of the University Graduation Writing Requirement will be changed.

## Current

Proposed
Stándard University course offering.
Standard University course offering.
List: $\qquad$ List: $\qquad$
X Specific course - list: MNG 371
Specific course) - list:
MNG 371 (no change)
5. List any changes to college-level requirements that must be satisfied.

Current
Proposed
$\square$ Standard college requirement.
List: $\qquad$ List: $\qquad$
Specific required course-list: $\qquad$ Specific course - list; $\qquad$
6. List pre-major or pre-professional course requirements that will change, including credit hours.

Current
CHE 105 (4)
CIS/WRD 110: Comp and Com I (3)

Proposed
CHE 105 (4) CIS/WRD 110 (3)

[^34]MA 113 (4)
MA 114 (4)
MA 213 (4)
PHYS 231 (4)
Plus an additional 13 credit hours applicable towards. the degree in mining engineering Subtotal: Premajor Hours (36)

CIS/WRD 111 (3)
MA 113 (4)
MA114(4)
MA 213 (4)
MNG 201 (3)
PHY 231 (4)
PHY 241 (1) or CHE 111 (1)
PHY 232 (4)
EM 221 (3)
EES 220 (4)
EGR 101 (1)
EGR 102 (2)
EGR 103 (2)
Subtotal: Premajor Hours (36)
7. List the major's course requirements that will change, including credit hours.

| Current | Proposed |
| :---: | :---: |
| CHE 107 (3) | MA 214 (3) |
| CS 221 (2) | EES 230 (3) |
| EE 305 (3) | EM302 (3) |
| EM 221 (3) | EM 313 (3) |
| EM313 (3) | ME 220 (3) |
| EM 302 (3) | ME 330 (3) |
| EES 220 (4) | MNG 211 (2) |
| EES 230 (3) | MNG 291 (3) |
| MA 214 (3) | MNG 301 (3) |
| ME 220 (3) | MNG 302 (1) |
| ME 330 (3) | MNG 303 (1) |
| MNG 101 (1) | MNG 311 (3) |
| MNG 191.(1) | MNG 322 (2) |
| MNG 211 (2) | MNG 331 (2) |
| MNG 264 (3) | MNG 332 (3) |
| MNG 291 (2) | MNG 335 (3) |
| MNG 301 (3) | MNG 341 (3) |
| MNG 302 (1) | MNG 351 (3) |
| MNG 303 (1) | MNG 371 (3) |
| MNG 322 (2) | MNG 435 (4) |
| MNG 331 (2) | MNG 463 (3) |
| MNG 332 (3) | MNG 551 (4). |
| MNG 335 (3) | MNG 535 (3) |
| MNG 341 (3) | MNG 575 or 580 (3) |
| MNG 371 (3) | MNG 591 (1) |
| MNG 435 (4) | MNG 592 (3) |
| MNG 463 (3) | Subtotal: Major hours (72) |
| MNG 551 (4) |  |
| MNG 591 (2)* |  |
| MNG 592 (3) |  |
| PHY 232 (4) |  |
| PHY 241 (1) |  |
| PHY 242 (1) |  |
| Subtotal: Major Hours (85) |  |
| * At the time of the last butletin publication, MNG 591 |  |
| was being converted from a |  |

credit hour course.
8. Does the pgm require a minor AND does the proposed change affect the required minor? $\triangle \mathrm{N} / \mathrm{A} \quad \square$ Yes $\square$ No If "Yes," indicate current courses and proposed changes below.

Current
Proposed
9. Does the proposed change affect any option(s)?

If "Yes," indicate current courses and proposed changes below, including credit hours, and also specialties and subspecialties, if any.

Current . Proposed
10. Does the change affect pgm requirements for number of credit hrs outside the major subject in a related field? If so, indicate current courses and proposed changes below.

Current
CHE 107 (3)
CS 221 (2)
EE 305 (3)
PHY 242 (1)

Proposed Drop CHE 107(3) Drop CS 221 (2)
MNG 311 (3) Replaces EE 305 (3)
Drop PHY 242 (1)
11. Does the change affect pgm requirements for technical or professional support electives? No If so, indicate current courses and proposed changes below.

## Current

Technical electives (6)
Proposed
Technicalelectives (3)
12. Does the change affect a minimum number of free credit hours or support electives? If "Yes," indicate current courses and proposed changes below.

## Current

Proposed
13. Summary of changes in required credit hours:


i. Total Credit Hours Required for Graduation: |  | $400-500:$ | $\underline{18}$ | $\underline{21}$ |
| :--- | :--- | :--- | :--- |
|  | $\underline{134}$ | $\underline{135}$ |  |

14. Rationale for Change(s) - if rationale involves accreditation requirements, please include specific references to that.

There are two reasons for the proposed changes:
(1) Continuous improvement process required by ABET, Inc indicated a need for increased emphasis in reserve modeling, eavironmental control and mitigation, mine design, and hard-rock mining methods.
(2) The College of Engineerng is planning to implement a common first-year engineering curriculum for all freshmen who are admitted into the College of Engineering.
25. List below the typical semester by semester program for the major. If multiple options are available, attach a separate sheet for each option.

| YEAR 1-FALL: | CHE 105 ( 4 cr ) | YEAR 1-SPRING: | CIS/WRD 111 (3 cr) |
| :---: | :---: | :---: | :---: |
| (e.g. "B10 103; 3 credits") | CIS/WRD 110 (3 cr) |  | EGR 103 (2 cr) |
|  | EGR 101 (1 cr) |  | MA 114 (4) |
|  | EGR 102 (2 cr) |  | PHY 231 (4 cr) |
|  | MA 113 (4 cr) |  | PHY 241 or CHE 111 (1) |
|  | Total: 14 Credits |  | UK Core-USA Ctznship ( 3 cr ) |
|  |  |  | Total: 17 credits |
| YEAR2-FALL: | EES 220 (4 cr) | YEAR 2 - SPRING: | EES 230 (3) |
|  | EM 221 (3 cr) |  | EM 302 (3) |
|  | MA 213 (4 cr) |  | MA 214 (3 cr) |
|  | MNG 201 (3 cr) |  | ME 220 (3cr) |
|  | PHY 232 ( 4 cr ) |  | MNG 291 (3 cr) |
|  | Total: 18 credits |  | MNG 303 (1 cr) |
|  |  |  | MNG 331 (2cr) |
|  |  |  | Total. 18 credits |
| YEAR 3 - FALL: | ME 330 (3 cr) | YEAR 3 -SPRING: | MNG 311 (3cr) |
|  | MNG 211 (2 cr) |  | MNG 322 (2 cr) |
|  | MNG 301 (3 cr) |  | MNG 371 ( 3 cr ) |
|  | MNG 302 (1 cr) |  | MNG 435 (4 cr) |
|  | MNG 335 (3 cr) |  | MNG 463 (3 cr ) |
|  | MNG 351 (3 cr) |  | Min Pro Tech Elec (3 cr) |
|  | UK Core - Social Science ( 3 cr ) |  | Total 18 credits |
|  | Total: 18 credits) . ... ... |  |  |
| YEAR 4 - FALL: | EM313 (3 cr) | YEAR 4 -SPRING: | MNG 592 (3 cr) |
|  | MNG 332 (3 cr) |  | Supportive Elective ( 3 cr ) |
|  | MNG 341 (3 cr) |  | Technical elective ( 3 cr ) |
|  | MNG 551 ( 4 cr ) |  | UK Core-Global Dyn ( 3 cr ) |
|  | MNG 535 (3 cr) |  | UK Core-Humanities ( 3 cr) |
|  | MNG 591 (1 cr) |  | Total: 15 credits |
|  | Total: 17 credits |  |  |

## Signature Routing Log

## General Information:

Current Degree Title and Major Name: BS in Mining Engineering, Mining Engineering
Proposal Contact Person Name: Joe Sottile
Phone: 257-4616
Email:
joseph.sottile@uky.edu

INSTRUCTIONS:
Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:


External-to-College Approvals:


Comments:

[^35]| From: | Holloway, Lawrence E |
| :--- | :--- |
| Sent: | Wednesday, October 07, 2015 10:47 AM |
| To: | Lumpp, Janet K |
| Cc: | Brandenburg, Barbara J; Hannemann, Regina; Smith, William T |
| Subject: | RE: EE305 and Mining |

Janet,
I am acknowledging receipt of your notice that Mining will no longer be requiring EE305.
I am copying Regina Hannemann, our instructor for EE305, and Bill Smith, who schedules our ECE classes, so that they are both aware of this change.
-Larry Holloway

## Larry,

Larry Holloway
Chair, Department of Electrical and Computer Engineering
Director, Power and Energy Institute of Kentucky
TVA Professor of Electrical and Computer Engineering
University of Kentucky, Lexington, KY 40506. USA
phone: 859-323-8523
ECE main phone: 859-257-8042
email: holloway@uky.edu
From: Lumpp, Janet K
Sent: Tuesday, Octqber 6, 2015 7:39 PM
To: Holloway, Lawrence E [larry.holloway@uky.edu](mailto:larry.holloway@uky.edu)
Subject: EE305 and/Mining

I sent you a requyst last Thursday to acknowledge that Mining is dropping EE305. Can you reply to that message and cc: $\beta \mathrm{J}$ Brandenburg please. I know it was crazy busy last week with advisory board.

Thanks!
Janet
--.
Dr. Janet K. Lampp - University of Kentucky
Director, First/Year Engineering Program
Professor, Eletrical \& Computer Engineering
email: jkimpp@uky.edu
phone: 85-257-4985


## Inquiry in the Humanities: Select from list

b. Inquiry in Natura/Physical/Mathematical Sciences: PHY 231/241 or CHE 105/111 cial Sciences: Select from list
ivity and the Arts: MNG 592
Communication I: CISNRD 110
Communication II: CISNRD 111
oundations: MA 113
Culture, and Citizenship in the U.S.: Select from list

a. Inquiry in the Humanities: Select from list
2. Inquiry in Natural/Physical/Mathematical Sciences: PHY 231/241
:. Inquiry in the Social Sciences: Select from list
i. Inquiry in Creativity and the Arts: MNG 592
Composition and Communication I: CISNRD 110
Composition and Communication Il: CISN/RD 111
.a. Quantititive Foundations: MA 113
.b. Statistical Inferential Reasoning: MNG 335
'a. Community, Culture, and Citizenship in the U.S.: Select from list
'.b. Global Dynamics: Select from list

## Mining Engineering

## Engineering Standing Requirements

## Current Requirements:

Completion of a minimum of 36 semester hours acceptable towards the degree in mining engineering with a minimum cumulative grade-point average of 2.50 . Completion of CIS/WRD 110, MA 113, MA 114, MA 213, CHE 105 and PHY 231 with a minimum cumulative GPA of 2.50 in these courses. University repeat options may be utilized as appropriate. Students who do not meet these GPA requirements may request consideration based upon departmental review, if both of these GPA values are 2.25 or greater.

## Proposed Requirements:

Completion of a minimum of 36 semester hours acceptable towards the degree in mining engineering with a minimum cumulative grade-point average of 2.50 . Completion of CIS/WRD 110, MA 113, MA 114, MA 213, CHE 105 and PHY 231 with a minimum cumulative GPA of 2.50 in these courses. University repeat options may be utilized as appropriate. Students who do not meet these GPA requirements may request consideration based upon departmental review, if both of these GPA values are $\mathbf{2 . 2 5}$ or greater.

Subject:
FW: Re: Enrollment changes due College of Engineering Curriculum Changes

Janet,
Thank you for making me aware of the impact of these changes.
I have discussed this with my Director of Undergraduate students Jurek Jaromczyk and with my faculty and we understand that these changes will have impact on the enrollment in our courses.
Best,
Brent

On Thu, Sep 24, 2015 at 12:06 PM, Janet K. Lumpp [jklumpp@uky.edu](mailto:jklumpp@uky.edu) wrote:
Dr. Seales,
As you know, the degree programs in the College of Engineering are all proposing undergraduate Curriculum Changes as a result of the First-Year Engineering courses and other departmental initiatives. Iam writing to make you aware of the changes that will affect several Computer Science courses no earlier than the Fall 2016 semester. As part of the proposal package, we need to include a reply from you acknowledging that you are aware of the changes that will impact enrollment in these courses.

CS 270 will be required for BS degrees in Computer Engineering
CS 115 will no longer be required for BS degrees in Computer Engineering and Electrical Engineering CS 221 will no longer be required for BS degrees in Biosystems Engineering, Civil Engineering, Materials Engineering, Mechanical Engineering and Mining Engineering
CS 441 will no longer be required for BS degrees in Computer Engineering CS 470 will no longer be required for BS degrees in Computer Engineering

Please reply all at your earliest convenience.
Thanks,
Janet

Dr. Janet K. Lumpp - University of Kentucky
Director, First-Year Engineering Program
Professor, Electrical \& Computer Engineering
email: jklumpp@uky.edu
phone: 859-257-4985

| From: | Lumpp, Janet K |
| :--- | :--- |
| Sent: | Thursday, October 01, $20154: 43$ PM |
| To: | Brandenburg, Barbara J |
| Cc: | Lumpp, Janet K |
| Subject: | Fwd: Re: Enrollment changes due College of Engineering Curriculum Changes |

--------- Forwarded Message -------
Subject:Re: Enrollment changes due College of Engineering Curriculum Changes
Date:Thu, 1 Oct 2015 16:33:25-0400
From:Meier, Mark [mark.meier@uky.edu](mailto:mark.meier@uky.edu)
To:Lumpp, Janet K [jklumpp@uky.edu](mailto:jklumpp@uky.edu)
CC:Selegue, J P [selegue@uky.edu](mailto:selegue@uky.edu), French, April N [april.french@uky.edu](mailto:april.french@uky.edu)

Hi Janet. I acknowledge that we have been informed of the proposed change that would remove the CHE 107 requirement for the BS in Mining Engineering and make CHE 111 optional.

Mark S. Meier<br>Chair, Department of Chemistry meier@uky.edu<br>859 257-7082

On Oct 1, 2015, at 4:18 PM, Lumpp, Janet K [iklumpp@uky.edu](mailto:iklumpp@uky.edu) wrote:
I missed another change from Mining Engineering. Please acknowledge again.
CHE 107 will no longer be required for the BS in Mining Engineering
CHE 111 will be optional for the BS in Mining Engineering, it was not previously required.
Thanks,
Janet
On 9/25/2015 2:36 PM, Meier, Mark wrote:
Dr. Lumpp. Thank you for your message. I am now aware of the proposed change to require CHE 105 for students in the Computer Science degree program.

Mark S. Meier
Chair, Department of Chemistry
meier@uky.edu
859 257-7082

This page is intentionally left blank.

## 1. General Information

| College: Engineerin |  |  | Department: Civil Engineering |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current Major Name: | Civil Engineering |  | Proposed Major Name: |  |  | same |  |
| Current Degree Title: | B.S.C.E |  | Proposed Degree Title: |  |  | same |  |
| Formal Option(s): NA | NA |  | Proposed Formal Option(s): |  |  | - |  |
| Specialty Field w/in Formal Option: | NA |  | Proposed Specialty Field w/in Formal Options: |  |  |  |  |
| Date of Contact with Associate Provost for Academic Administration ${ }^{1}$ : 9/1/15 |  |  |  |  |  |  |  |
| Bulletin (yr \& pgs): | $\begin{aligned} & \underline{2015-16 ~ p g ~} \\ & \underline{245} \end{aligned}$ | CIP Code ${ }^{1}$ : | $\underline{14.0801}$ |  |  | Today's Date: | 9/10/15 |
| Accrediting Agency (if applicable): Accreditation Board for Engineering and Technology (ABET, Inc) |  |  |  |  |  |  |  |
| Requested Effective Date: $\boxtimes$ Semester following approval. |  |  |  | OR $\square$ S |  | Secific Date ${ }^{2}$ : |  |
| Dept. Contact Person | Scott Yost |  | Phone: | 257-4816 |  | Email: scott.yost@uky.edu |  |

## 2. General Education Curriculum for this Program:

The new General Education curriculum is comprised of the equivalent of 30 credit hours of course work. There are, however, some courses that exceed 3 credits \& this would result in more than 30 credits in some majors.

- There is no foreign language requirement for the new Gen Ed curriculum.
- There is no General Education Electives requirement.

Please list the courses/credit hours currently used to fulfill the University Studies/General Education curriculum:
Intellectual Inquiry in Arts and Creativity: EGR101 (1) and EGR103 (2)
Intellectual Inquiry in the Humanities: Choose one course from approved list (3)
Intellectual Inquiry in the Social Sciences: Choose one course from approved list (3)
Intellectual Inquiry in the Natural, Physical, and Mathematical Sciences: PHY 231 (4) and PHY 241 (1)
Composition and Communication I: CIS/WRD 110 (3)
Composition and Communication II: CIS/WRD 111 (3)
Quantitative Foundations: MA 113 (4)
Statistical Inferential Reasoning: STA 381 (3)
Community, Culture and Citizenship: Choose one course from approved list (3)
Global Dynamics: Choose one course from approved list (3)

## Please identify below the suggested courses/credit hours to fulfill the General Education curriculum.

| General Education Area | Course | Credit Hrs |
| :---: | :---: | :---: |
| I. Intellectual Inquiry (one course in each area) |  |  |
| Arts and Creativity | $\frac{E R G 101 \text { and } E G R}{\underline{103}}$ | $\underline{1 / 2}$ |

[^36]| Humanities | select from list | 3 |
| :---: | :---: | :---: |
| Social Sciences | select from list | $\underline{3}$ |
| Natural/Physical/Mathematical | PHY231/241 | 4/1 |
| II. Composition and Communication |  |  |
| Composition and Communication I | CIS or WRD 110 | 3 |
| Composition and Communication II | CIS or WRD 111 | 3 |
| III. Quantitative Reasoning (one course in each area) |  |  |
| Quantitative Foundations ${ }^{3}$ | MA 113 | $\underline{4}$ |
| Statistical Inferential Reasoning | STA381 | $\underline{3}$ |
| IV. Citizenship (one course in each area) |  |  |
| Community, Culture and Citizenship in the USA | select from list | $\underline{3}$ |
| Global Dynamics | select from list | $\underline{3}$ |
| Total General Education Hours |  | 33 |

3. Explain whether the proposed changes to the program (as described in sections 4 to 12 ) involve courses offered by another department/program. Routing Signature Log must include approval by faculty of additional department(s).

The proposed curriculum changes involve the addition of EGR 101, 102 and 103, and the elimination of CS 221 and CE 120. It also is adding the recently approve ERG 101/103 course for the UKCore arts and creativity.
4. Explain how satisfaction of the University Graduation Writing Requirement will be changed.

| Current | Proposed |
| :--- | :--- |
| $\boxtimes$ <br> Standard University course offering. <br> List: | $\square$ <br> Standard University course offering. <br> List: |
| $\boxtimes$ Specific course - list: | $\underline{\text { WRD } 204}$ |

5. List any changes to college-level requirements that must be satisfied.

6. List pre-major or pre-professional course requirements that will change, including credit hours.

| Current | Proposed |
| :--- | :--- |
| CIS/WRD110 or equivalent (3 hrs) <br> MA113 (4 hrs) | $\frac{\text { CIS/WRD110 or equivalent (3 hrs) }}{\text { CIS/WRD111 or equivalent (3 hrs) }}$ |
| MA114 (4 hrs) <br> MA213 (4 hrs) <br> CHE105 (4 hrs) <br> CHE107 (3 hrs) | $\frac{\text { MA113 (4 hrs) }}{\text { PA114 (4 hrs) }}$ |

[^37]PHY241 (1 hr)
PHY231 (4 hrs)
CE120 (1 hr)
CE106 (3 hrs)
CE211 (4hrs)
EM221 (3 hrs)

PHY241 (1 hr)
EGR 101 (1 hr)**
EGR $102(2 \mathrm{hr})^{* *}$
EGR 103 ( 2 hr$)^{* *}$
CE106 (3 hrs)
CE211 (4hrs)
EM221 (3 hrs
**proposed new courses)
7. List the major's course requirements that will change, including credit hours.

| Current | Proposed |
| :---: | :---: |
| CS 221 (2 hr) | EM 302 (3 hr) |
| EM 302 (3 hr) | MNG 303 (1 hr) |
| MNG 303 (1 hr) | MA 214 (3 hr) |
| MA 214 (3 hr) | PHY 232 (4 hr) |
| PHY 232 (4 hr) | PHY 242 (1 hr) |
| PHY 242 (1 hr) | STA 381 (3 hr) |
| STA 381 (3 hr) | EES 220 (4 hr) |
| EES 220 (4 hr) | CE 303 (3 hr) |
| CE 303 (3 hr) | CE 341 (4 hr) |
| CE 341 (4 hr) | CE 381 (3 hr) |
| CE 381 (3 hr) | CE 331 (3 hr) |
| CE 331 (3 hr) | CE 351 (3 hr) |
| CE 351 (3 hr) | CE 382 (3 hr) |
| CE 382 (3 hr) | CE 461G (4 hr) |
| CE 461G (4 hr) | CE 471G (4 hr) |
| CE 471G (4 hr) | CE 401 (1 hr) |
| CE 401 (1 hr) | CE 429 (3 hr) |
| CE 429 (3 hr) |  |

8. Does the pgm require a minor AND does the proposed change affect the required minor? $\boxtimes$ N/A $\square$ Yes $\square$ No If "Yes," indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |

9. Does the proposed change affect any option(s)? If "Yes," indicate current courses and proposed changes below, including credit hours, and also specialties and subspecialties, if any.

| Current | Proposed |
| :--- | :--- |
|  | - |

10. Does the change affect pgm requirements for number of credit hrs outside the major subject in a related field? If so, indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |

11. Does the change affect pgm requirements for technical or professional support electives? If so, indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |

12. Does the change affect a minimum number of free credit hours or support electives? $\boxtimes$ Yes $\square$ No If "Yes," indicate current courses and proposed changes below.

| Current | Proposed |
| :--- | :--- |
| technically there is no change, as CIS/WRD111, | We have inlcuded CIS/WRD111 in our pre-major <br> required by UKCORE, was mapped to the free |
| elective place holder as it was not listed in our pre- | courses, and hence removed the placeholder free <br> elective |

## 13. Summary of changes in required credit hours:

|  |  |  | Current | Proposed |
| :---: | :---: | :---: | :---: | :---: |
| a. Credit Hours of Premajor or Preprofessional Courses: |  |  | 38 | $\underline{45}$ |
| b. Credit Hours of Major's Requirements: |  |  | $\underline{52}$ | $\underline{50}$ |
| c. Credit Hours for Required Minor: |  |  | NA | NA |
| d. Credit Hours Needed for a Specific Option: |  |  | NA | NA |
| e. Credit Hours Outside of Major Subject in Related Field: |  |  | $\underline{13}$ | $\underline{13}$ |
| f. Credit Hours in Technical or Professional Support Electives: |  |  | $\underline{18}$ | $\underline{18}$ |
| g. Minimum Credit Hours of Free/Supportive Electives: |  |  | $\underline{3}$ | $\underline{3}$ |
| h. Total Credit Hours Required by Level: |  | 100: | $\underline{27}$ | $\underline{29}$ |
|  |  | 200: | $\underline{31}$ | $\underline{31}$ |
|  |  | 300: | $\underline{26}$ | $\underline{26}$ |
|  |  | 400-500: | $\underline{24}$ | $\underline{24}$ |
| i. Total Credit Hours Required for Graduation: |  |  | $\underline{132}$ | 131 |

14. Rationale for Change(s) - if rationale involves accreditation requirements, please include specific references to that.

Overall motivation is that the College of Engineering is proposing a common first year curriculum for all Freshman engineering students. In support of this, we have dropped CE 120 and CS 221 (decrease of 3 credit hours) and added the proposed EGR 101/102/103 (increase of 5 credit hours). The new ERG 101/103 were together approved for UKcore Arts and Creativity, and hence we will use that for our students (decrease of 3 credit hours). The result is a net 1 credit hour decrease ( $132==>131$ ) for the program. We reshuffled the courses in the 8 semester curricular plan and modified the admission requirements to Civil Engineering to accommodate the changes (dropped CE 120, added EGR 103).

Next, we cleaned up a few things: First we want to require a C or better in the GCCR course (WRD 204). Next we added CIS110 and CIS 111 as approved equivalent courses (instead of just requiring WRD 110/111). Finally we reworked a classes in the pre-major (increase) and major (decrease) list as well as adding CIS/WRD111 to the pre-major requirement list (and hence dropping the supportive/free elective in the electives list). Prior CIS/WRD111 was not listed in pre-major or major list.

As mentioned above, we had to make some changes in our admission criteria to the department to accommodate the dropping/adding courses for the common first year program. See the attached modification of the admission requirements for the Civil Engineering Program, called Engineering Standing. All the GPA and grade requirements are the same, just swapped out a two courses (dropped CE120, replaced with EGR103).
15. List below the typical semester by semester program for the major. If multiple options are available, attach a separate sheet for each option.

| YEAR 1 - FALL: <br> (e.g. "BIO 103; 3 credits") | UKCore: A\&C (EGR 101) (1) <br> EGR 102 (2) <br> UKCore: C\&C (CISIWRD 110) <br> (3) <br> UKCore: QR QF(MA 113 (4) <br> CHE 105 (4) | YEAR 1 - SPRING: | UKCore: A\&C (EGR 103) (2) <br> UKCore: C\&C (CISIWRD <br> 111) (3) <br> MA 114 (4) <br> UKCore: Physical (PHY 231) <br> (4) <br> UKCore: Physical (PHY 241) <br> (1) <br> UKCore: Social Science (3) |
| :---: | :---: | :---: | :---: |
| YEAR 2 - FALL : |  | YEAR 2 - SPRING: | EM 302 (3) <br> MNG 303 (1) <br> MA 214 (3) <br> PHY 232 (4) <br> PHY 242 (1) <br> UKCore: QR SIR (STA 381) <br> (3) |
| YEAR 3 - FALL: | WRD 204 (3)EES 220 (4) <br> CE 303 (3) <br> CE $341(4)$ <br> CE $381(3)$ ( | YEAR 3 -SPRING: | $\begin{aligned} & \frac{\text { CE } 331(3)}{\text { CE 351 (3) }} \\ & \text { CE 382 (3) } \\ & \text { Engr Science Elective (3) } \\ & \text { Math or Science Elective (3) } \\ & \hline \text { UKCore: Humanities (3) } \end{aligned}$ |
| YEAR 4 - FALL: | $\begin{aligned} & \frac{\text { CE 461G (4) }}{\text { CE 471G (4) }} \\ & \text { CE 48X (3) } \\ & \text { Design Elective (3) } \\ & \text { UKCore: Citizenship US (3) } \end{aligned}$ | YEAR 4 - SPRING: | CE 401(1) <br> CE 429 (3) <br> Design Elective (3) <br> Technical Elective (3) <br> Supportive Elective (3) <br> UKCore: Citizenship Global <br> Dynamics (3) |

## Signature Routing Log

## General Information:

Current Degree Title and Major Name: B.S.C.E
Proposal Contact Person Name: Scott Yost
Phone: 257-4816

Email:
scott.yost@uky.edu

INSTRUCTIONS:
Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

## Internal College Approvals and Course Cross-listing Approvals:

| Reviewing Group | Date <br> Approved | Contact Person (name/phone/email) <br> Reg Souleyrette / 257-5309 / <br> souleyrette@uky.edu | Signature |
| :--- | :---: | :---: | :---: |
| CE Faculty | $9 / 11 / 15$ | $/$ |  |

## External-to-College Approvals:

| Council | Date <br> Approved | Signature | Approval of <br> Revision |
| :---: | :---: | :---: | :---: |
| Undergraduate Council | $12 / 15 / 15$ | Joanie Ett-Mims |  |
| Graduate Council |  |  |  |
| Health Care Colleges Council |  |  |  |
| Senate Council Approval |  | University Senate Approval |  |

Comments:
See attachments in support of this program changes application:
current CE curriculum
proposed CE curriculum
proposed engineering standing (admision requirements to CE program)

Note that we are formally requiring a C or better in the GCCR course

[^38]
# CIVIL ENGINEERING UNDERGRADUATE PROGRAM-proposed FRESHMAN YEAR 



* GCCR course
** CE communication throughout the curriculum component
(1) ME 220 - Thermodynamics or EM 313 - Dynamics
(2) Math or Science Elective Options: MA 321, MA 322, MA 416G, MA 432G, BIO 208, CHE 230, CHE 236, EE 305, GEO 409G, GLY/EES 550, GLY/EES 585, MNG 551, or the other half of the Engineering Science Elective in (1). NOTE: MA 322 is required for a math minor.
(3) CE 482 or CE 486G
(4) Students are required to select two design electives from different areas. Chose from: CE 508, CE 531 or CE 533, CE 534, CE 549, CE 551, CE 579, CE 589. Design elective courses are typically taught once a year.
(5) Technical Electives are to be chosen from any of the courses at the 300-level or above that carry a CE prefix and in which a student is qualified to enroll, exclusive of required courses. Engineering elective courses are typically taught once a year.
(6) Supportive elective is to be chosen from any university course excluding more elementary versions of required courses such as precalculus mathematics or PHY 211. However, each CE area has at least one recommendation for the supportive elective. Please review the Optional Concentration section in the Civil Engineering Undergraduate Handbook. The supportive elective can be taken P/F.


## CIVIL ENGINEERING UNDERGRADUATE PROGRAM FRESHMAN YEAR

| First Semester | Credit Hours | Second Semester | Credit Hours |
| :---: | :---: | :---: | :---: |
| CE 120 - Intro to Civil Engrg | 1 | CE 106-Computer Graphics/Comm | 3 |
| UKCore: C\&C (WRD 110-Comp and Comm I) | 3 | MA 114 - Calculus II | 4 |
| UKCore: QR QF(MA 113 - Calculus I) | 4 | UKCore: Physical (PHY 231 - Gen Univ Physics) | 4 |
| UKCore: Arts \& Creativity | 3 | UKCore: Physical (PHY 241 - Gen Univ Physics Lab) | 1 |
| UKCore: Social Science | 3 | CHE 105-Gen Coll Chem I | 4 |
| Semester Hours | 14 | Semester Hours | 16 |
| SOPHOMORE YEAR |  |  |  |
|  | CreditHours |  | Credit |
| First Semester |  | Second Semester | Hours |
| CE 211 - Surveying | 4 | EES 220 - Physical Geology | 4 |
| CHE 107-Gen Coll Chem II | 3 | EM 302 - Mech of Deform Solids | 3 |
| EM 221 - Statics | 3 | MNG 303 - Deformable Solids Lab | 1 |
| MA 213-Calculus III | 4 | MA 214 - Calculus IV | 3 |
| UKCore: C\&C (WRD 111 - Comp and Comm II) | 3 | PHY 232-Gen Univ Physics | 4 |
|  |  | PHY 242 - Gen Univ Physics Lab | 1 |
| Semester Hours | 17 | Semester Hours | 16 |
|  | JUNIOR YEAR |  |  |
|  | Credit |  | Credit |
| First Semester | Hours | Second Semester | Hours |
| WRD 204 - Technical Writing for CE* | 3 | CE 331 - Transportation Engrg** | 3 |
| CE 303 - Intro to Constr Engrg | 3 | CE 351 - Intro Envr Engrg | 3 |
| CE 341 - Fluid Mechanics | 4 | CE 382 - Structural Analysis | 3 |
| CE 381 - CE Materials** | 3 | Engr Science Elective (1) | 3 |
| UKCore: QR SIR (STA 381- Intro Engg Statistics) | 3 | Math or Science Elective (2) | 3 |
| CS 221 - First Course in CS for Engrs | 2 | UKCore: Humanities | 3 |
| Semester Hours | 18 | Semester Hours | 18 |
|  | SENIOR YEAR |  |  |
|  | Credit |  | Credit |
| First Semester | Hours | Second Semester | Hours |
| CE 461G - Water Resources Engr** | 4 | CE 401 - Seminar** | 1 |
| CE 471G - Soil Mechanics** | 4 | CE 429 - CE Systems Design** | 3 |
| CE 48X - Structures Elective (3) | 3 | Design Elective (4) | 3 |
| Design Elective (4) | 3 | Technical Elective (5) | 3 |
| UKCore: Citizenship US | 3 | Supportive Elective (6) | 3 |
|  |  | UKCore: Citizenship Global Dynamics | 3 |
| Semester Hours | 17 | Semester Hours | 16 |
| TOTAL SEMESTER HOURS 132 |  |  |  |

* GCCR course
** CE communication throughout the curriculum component
(1) ME 220 - Thermodynamics or EM 313 - Dynamics
(2) Math or Science Elective Options: MA 321, MA 322, MA 416G, MA 432G, BIO 208, CHE 230, CHE 236, EE 305, GEO 409G, GLY/EES 550, GLY/EES 585, MNG 551, or the other half of the Engineering Science Elective in (1). NOTE: MA 322 is required for a math minor.
(3) CE 482 or CE 486G
(4) Students are required to select two design electives from different areas. Chose from: CE 508, CE 531 or CE 533, CE 534, CE 549, CE 551, CE 579, CE 589. Design elective courses are typically taught once a year.
(5) Technical Electives are to be chosen from any of the courses at the 300 -level or above that carry a CE prefix and in which a student is qualified to enroll, exclusive of required courses. Engineering elective courses are typically taught once a year.
(6) Supportive elective is to be chosen from any university course excluding more elementary versions of required courses such as precalculus mathematics or PHY 211. However, each CE area has at least one recommendation for the supportive elective. Please review the Optional Concentration section in the Civil Engineering Undergraduate Handbook. The supportive elective can be taken P/F.

Current Civil Engineering Standing.
Completion of CE 106, CE 120, CE 211, CHE 105, CHE 107, EM 221, WRD 110, MA 113, MA
114, MA 213, PHY 231, PHY 241 with a minimum cumulative grade-point average (GPA) of 2.50 in these classes and a $\mathbf{C}$ or better in each of them as well as 45 or more semester credit hours. University repeat options may be utilized. Students who do not meet this GPA requirement may request consideration based upon departmental review if this core GPA is 2.25 or greater. Students are limited to two applications for engineering standing.

Proposed Civil Engineering Standing.
Completion of CE 106, CE 211, CHE 105, CHE 107, EM 221, WRD\CIS 110, MA 113, MA 114, MA 213, PHY 231, PHY 241 with a minimum cumulative grade-point average (GPA) of 2.50 in these classes and a C or better in each of them, as well as 45 or more semester credit hours. University repeat options may be utilized. Students who do not meet this GPA requirement may request consideration based upon departmental review if this core GPA is 2.25 or greater. Students are limited to two applications for engineering standing.

## Subject:

FW: Re: Enrollment changes due College of Engineering Curriculum Changes

Janet,
Thank you for making me aware of the impact of these changes.
I have discussed this with my Director of Undergraduate students Jurek Jaromczyk and with my faculty and we understand that these changes will have impact on the enrollment in our courses.
Best,
Brent

On Thu, Sep 24, 2015 at 12:06 PM, Janet K. Lumpp <jklumpp@,uky.edu> wrote:
Dr. Seales,
As you know, the degree programs in the College of Engineering are all proposing undergraduate Curriculum Changes as a result of the First-Year Engineering courses and other departmental initiatives. I am writing to make you aware of the changes that will affect several Computer Science courses no earlier than the Fall 2016 semester. As part of the proposal package, we need to include a reply from you acknowledging that you are aware of the changes that will impact enrollment in these courses.

CS 270 will be required for BS degrees in Computer Engineering
CS 115 will no longer be required for BS degrees in Computer Engineering and Electrical Engineering CS 221 will no longer be required for BS degrees in Biosystems Engineering, Civil Engineering, Materials Engineering, Mechanical Engineering and Mining Engineering
CS 441 will no longer be required for BS degrees in Computer Engineering
CS 470 will no longer be required for BS degrees in Computer Engineering
Please reply all at your earliest convenience.
Thanks,
Janet

Dr. Janet K. Lumpp - University of Kentucky
Director, First-Year Engineering Program
Professor, Electrical \& Computer Engineering
email: jklumpp@uky.edu
phone: 859-257-4985

## Proposed addition to sections of SR 6.4 to clarify the rules pertaining to the stand of

 proof when adjudicating student offences.Background: (reference the Ombud report to the Senate)
After defining the standard of proof, then all reference to findings in S.R. 6.4 will include "standard of proof". So below includes the proposed additional text throughout S.R. 6.4, after defining the standard of proof in the definition section.

### 6.4.0 Definitions

For purposes of this Section 6.4:
J. The preponderance of the evidence standard shall be the "Standard of Proof" applied by each decision maker when determining whether a student has committed an academic offense.

### 6.4.3 Initial Determination

## A. By the Instructor and Chair

2. Finding. The instructor shall consider the evidence and the student's response and shall decide, based on the standard of proof, whether the student committed an academic offense. Any such finding shall be made within 7 days after the meeting with the student, unless the student consents in writing to an extension of this time. However, if the student fails to respond to the invitation to meet within the deadline or fails to attend a meeting that was agreed upon by all parties, the instructor may make a finding immediately thereafter.

## B. By the Dean

1. Cases Requiring Action by a Dean. A dean may be required to take action in a case of an academic offense in the following circumstances:
(c) A student enrolled in the dean's college is accused of an offense, either with respect to a course in which the student is not enrolled, or in academic work outside of a course (for example, an honors project or dissertation, a graduate examination, a thesis or dissertation, or a formally submitted thesis or dissertation proposal). In this case, the procedure outlined in paragraphs 6.4.3.A.1, 6.4.3.A.2, and 6.4.3.A. 4 above shall be followed, except that the dean assumes the roles of both instructor and chair. If the dean finds the student committed the offense, based on the standard of proof, the dean shall either decline to impose a penalty or shall
forward the case to the Provost recommending a penalty of suspension, dismissal, expulsion, or revocation of a degree. The student has the right to appeal any finding, even if no penalty is imposed, and any recommended penalty, pursuant to Section 6.4.4 below.

## C. By the Registrar

1. Finding. The Registrar shall consider the evidence and the student's response and shall decide whether the student committed the alleged offense, based on the standard of proof. Any such finding shall be made within 7 days after the meeting with the student, unless the student consents in writing to an extension of this time. However, if the student fails to respond to the invitation to meet within the deadline or fails to attend a meeting that was agreed upon by all parties, the Registrar may make a finding immediately thereafter.

### 6.4.4 Appeals to the University Appeals Board

## A. Preliminary consideration by the Academic Ombud

2. Merit of Appeal of Penalty for Minor Offense. If the student does not dispute the finding of a minor offense [as defined in paragraph 6.4.3.A.3.d], but the student desires to appeal the penalty on the basis that it is unduly harsh, the Academic Ombud shall decide whether the appeal has merit, based on the standard of proof. In making such a decision, the Academic Ombud should proceed with deference to the instructor's traditional autonomy and authority over the course.

## B. To the Appeals Board

## 4. Scope of review

(a) Violation. The Appeals Board shall sit as a fact-finding body and determine whether or not the student cheated, plagiarized, or falsified or misused academic records from such evidence as is brought before the Board (including testimony under oath, written statements, exhibits, and a view of the classroom
where the cheating occurred if this be an issue). The Board may call witnesses on its own initiative and may continue the hearing for this purpose. The Board shall find the student did not commit the offense unless a majority of members present decides otherwise, based on the standard of proof, and given the evidence provided.
Current Benchmarks Identified by the University Review Committee

| Institution | Document | Standard | Reference |
| :--- | :--- | :--- | :--- |
| Michigan State Univ. | Academic Freedom for Students at Michigan <br> State Univ. | preponderance of the evidence | 7. IV. D |
| Ohio State Univ. | Code of Student Conduct | preponderance of the evidence | FAQ |
| Univ. of Arizona | TODE OF ACADEMIC INTEGRITY | Preponderance of the evidence | p2 |
| Univ. of California - Davis | 4.042 Student Honor Code and Student <br> Conduct Code | Preponderance of the evidence | p2 |
| Univ. of Florida | Student Judicial Procedure | preponderance of the evidence |  |
| Univ. of lowa | Statement of Student Rights and <br> Responsibilities | clear and convincing evidence | item 9 |
| Univ. of Michigan - Ann Arbor | Student Academic Integrity Misconduct <br> Procedures | more likely than not (which is <br> preponderance) | 3.2.7.C |
| Univ. of Minnesota - Twin Cities | Standard of Conduct | preponderance of the evidence | various |
| Univ. of Missouri - Columbia | Instrument of Student Judicial Governance | clear and convincing (mainly) and <br> preponderance of the evidence | various |
| Univ. of North Carolina at Chapel Hill | both, depends on severity of the case | various |  |
| Univ. of Wisconsin - Madison |  <br> Procedures |  |  |

## To: Senate Council From: SREC <br> RE: Proposal to Change to SR 1.5.2 and Proposal re: to GR X.A.2.b

1. Proposal: That the Senate Council approve changes in SR 1.5.2 and send to the Senate floor. The ' Note' in SR 1.5 .2 be deleted as shown below.

### 1.5.2 ELECTION: TWO VOTING UNIVERSITY FACULTY MEMBERS, BOARD OF TRUSTEES

[See US: 10/12/88; US: 10/8/2001; US: 12/8/05; BoT: 6/2005]
As specified state law (KRS 164.131(1)(e) and implemented in the Governing Regulations (Part II.A.2.b.1) there shall be two (2) voting faculty members of the Board of Trustees who are "members of the faculty of the University." In accordance with KRS 164.131(3) and as implemented in GR II.A.2.b.1, the University Faculty members who are eligible to vote for, and eligible to serve as, elected members of the Board of Trustees shall be those members who are regular, full-time faculty employees with a rank at the level of assistant professor (or its equivalent, Librarian III) or above, whose primary assignments, i.e., more than fifty percent (50\%), are in instruction, research, and/or public service, as defined in Human Resources Policy and Procedure Administrative Regulation 4.0: Employee Status. [GR II.A.2.b.(I)]

* For the purposes of election of Faculty Trustees, AR 3:2 is here interpreted to allow voting by, but not election of, faculty employees on phased retirement. [SREC: 12/17/13].
(NOTE: GR X-1 states that: Members of the Board of Trustees, except those elected to the Board as faculty, staff, or student representatives, and relatives of any member of the Board of Trustees are ineligible for employment at the University. "Relatives", as used above, include parents and children, husbands and wives, brothers and sisters, brothers-and sisters-in-law, mothers- and fathers-in-law, uncles, aunts, nieces and nephews, sons-and daughters-in-law, and step-relatives in the same relationships. Employment includes regular and temporary fulland part-time employment, including student work-study and graduate assistant programs.)

Rationale: Pursuant to Kentucky Attorney General Opinion OAG15-009 issued April 16, 2015, "A person may be elected or appointed to a state college or university board of regents or trustees if that person has a relative who is employed by the college or university prior to the election or appointment of the regent or trustee." However, a relative of a trustee may not begin employment at the University during the trustee's term. SR 1.5.2 needs to be corrected to reflect the Attorney General's Opinion.

## Discrimination \& Title IX Language - Addition to Syllabus Template/Guidelines

## Proposed additional, optional language for syllabi:

The University of Kentucky faculty are committed to supporting students and upholding the University's non-discrimination policy.

Discrimination is prohibited at UK. If you experience an incident of discrimination we encourage you to report it to Institutional Equity \& Equal Opportunity (IEEO) Office, 13 Main Building, (859) 257-8927.

Acts of Sex- and Gender-Based Discrimination or Interpersonal Violence If you experience an incident of sex- or gender-based discrimination or interpersonal violence, we encourage you to report it. While you may talk to a faculty member or TA/RA/GA, understand that as a "Responsible Employee" of the University these individuals MUST report any acts of violence (including verbal bullying and sexual harassment) to the University's Title IX Coordinator in the IEEO Office. If you would like to speak with someone who may be able to afford you confidentiality, the Violence Intervention and Prevention (VIP) program (Frazee Hall - Lower Level; http://www.uky.edu/StudentAffairs/VIPCenter/), the Counseling Center (106 Frazee Hall, http://www.uky.edu/StudentAffairs/Counseling/), and the University Health Services (http://ukhealthcare.uky.edu/uhs/student-health/) are confidential resources on campus.

# IX Examples, Other Institutions 

University of Michigan : https://sapac.umich.edu/article/faculty-resources-sample-syllabus-language:

Student Sexual Misconduct Policy

Our school is committed to fostering a safe, productive learning environment. Title IX and our school policy prohibit discrimination on the basis of sex, which regards sexual misconduct - including harassment, domestic and dating violence, sexual assault, and stalking. We understand that sexual violence can undermine students' academic success and we encourage students who have experienced some form of sexual misconduct to talk to someone about their experience, so they can get the support they need.

Confidential support and academic advocacy can be found with the Sexual Assault Prevention and Awareness Center (SAPAC) on their 24-hour crisis line, 734-936-3333 and at http://sapac.umich.edu/. Alleged violations can be non-confidentially reported to the Office for Institutional Equity (OIE) at institutional.equity@umich.edu. Reports to law enforcement can be made to University of Michigan Police Department at 734-763-3434.

## Student Sexual Misconduct Policy

Title IX prohibits sex discrimination to include sexual misconduct: harassment, domestic and dating violence, sexual assault, and stalking. If you or someone you know has been harassed or assaulted, you can receive confidential support and academic advocacy at the Sexual Assault Prevention and Awareness Center (SAPAC). SAPAC can be contacted on their 24-hour crisis line, 734-936-3333 and online at sapac.umich.edu. Alleged violations can be reported non-confidentially to the Office for Institutional Equity (OIE) at institutional.equity@umich.edu. Reports to law enforcement can be made to University of Michigan Police Department at 734-763-3434.

Syllabus Language Regarding Confidentiality

Faculty who also supervise staff, advise student groups, or hold other administrative positions may have mandatory reporting responsibilities. In order to help ensure that students are making informed decisions about sharing their personal experiences, it is a good practice to provide information about your mandatory reporting responsibilities. If you are unsure whether you have mandatory reporting responsibilities, please contact the Dean of your school or college for clarification. Sample syllabus language regarding mandatory reporting is below:

## Confidentiality and Mandatory Reporting

As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. I also have a mandatory reporting responsibility related to my role as a XX (specify if desired). It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep information you share private to the greatest extent possible. However, I am required to share information regarding sexual misconduct or information about a crime that may have occurred on U-M's campus with the University. Students may speak to someone confidentially by contacting SAPAC's Crisis Line at (734) 936-3333.

## Confidentiality and Mandatory Reporting

As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. I also have a mandatory reporting responsibility related to my role as a XX (specify if desired). I am required to share information regarding sexual misconduct or information about a crime that may have occurred on U-M's campus with the University. Students may speak to someone confidentially by contacting SAPAC's Crisis Line at (734) 936-3333.

## Title IX Syllabus/Course Information Language

Faculty are encouraged to include the following approved language regarding Title IX reporting and student resources in their course syllabi or course content handouts to students.

COURSE CONTENT NOTE: CSU's Student Sexual Harassment and Violence policy, following national guidance from the Office of Civil Rights, requires that faculty follow CSU policy as a "mandatory reporter" of any personal disclosure of sexual harassment, abuse, and/or violence related experiences or incidents shared with the faculty member in person, via email, and/or in classroom papers or homework exercises. These disclosures include but are not limited to reports of personal relational abuse, relational/domestic violence, and stalking. While faculty are often able to help students locate appropriate channels of assistance on campus (e.g., see the CSU Health Network link below), disclosure by the student to the faculty member requires that the faculty member inform appropriate CSU channels to help ensure that the student's safety and welfare is being addressed, even if the student requests that the disclosure not be shared.

For counseling support and assistance, please see the CSU Health Network, which includes a variety of counseling services that can be accessed at: http://www.health.colostate.edu/. And, the Sexual Assault Victim Assistance Team is a confidential resource for students that does not have a reporting requirement and that can be of great help to students who have experienced sexual assault. The web address is http://www.wgac.colostate.edu/need-help-support.

University of Oregon: http://aaeo.uoregon.edu/sexual-harassment-assault/faculty-and-staff-resources/title-ix-required-employee-reporting-language-course-syllabi

## OPTION 1

The UO is committed to providing an environment free of all forms of prohibited discrimination and sexual harassment (sexual assault, domestic and dating violence, and gender or sex-based bullying and stalking). If you have experienced any form of gender or sex-based discrimination or harassment, know that help and support are available. UO has staff members trained to support survivors in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, helping with legal protective orders, and more.

Please be aware that all UO employees, other than designated confidential resources (see https://safe.uoregon.edu/services) are required to report credible evidence of prohibited discrimination, including sexual harassment and sexual violence. This means that if you tell me about a situation of sexual harassment or sexual violence that may have violated university policy or state or federal law, I have to share the information with my supervisor or the University's Title IX Coordinator or the Office of Affirmative Action.

If you wish to speak to someone confidentially, you can call 541-346-SAFE, UO's 24-hour hotline to be connected to a confidential counselor to discuss your options, as confidential counselors are not required reporters. You can also visit the SAFE website at https://safe.uoregon.edu/services for more information. Each resource is clearly labeled as either "required reporter," "confidential UO employee," or "offcampus," to allow you to select your desired level of confidentiality.

## OPTION 2

As an instructor, one of my responsibilities is to help create a safe learning environment for my students and for the campus as a whole. As a member of the university community, I have the responsibility to report any instances of sexual harassment, sexual violence and/or other forms of prohibited discrimination. If you would rather share information about sexual harassment, sexual violence or discrimination to a confidential employee who does not have this reporting responsibility, you can find a list of those individuals here. Each resource is clearly labeled as either "required reporter," "confidential UO employee," or "off-campus," to allow you to select your desired level of confidentiality.

## OPTION 3

All faculty and staff share in the responsibility to create a safe learning environment for all students and for the campus as a whole. As members of the campus community, all faculty and staff (other than those designated as confidential reporters) are designated as responsible employees and therefore have the duty to report any instances of sexual harassment, sexual violence and/or other forms of prohibited discrimination. If a student would prefer to share information about sexual harassment, sexual violence or discrimination to a confidential employee who does not have this reporting responsibility, a list of those individuals can be found here. Each resource is clearly labeled as either "required reporter," "confidential UO employee," or "off-campus," to allow you to select your desired level of confidentiality.

St. Louis University: http://www.slu.edu/college-of-arts-and-sciences-home/faculty-and-staff-resources/syllabi-statements?site=mobile

## Title IX Syllabus Statement

Saint Louis University and its faculty are committed to supporting our students and seeking an environment that is free of bias, discrimination, and harassment. If you have encountered any form of sexual misconduct (e.g. sexual assault, sexual harassment, stalking, domestic or dating violence), we encourage you to report this to the University. If you speak with a faculty member about an incident of misconduct, that faculty member must notify SLU's Title IX coordinator, Anna R. Kratky (DuBourg Hall, room 36; akratky@slu.edu; 314-977-3886) and share the basic fact of your experience with her. The Title IX coordinator will then be available to assist you in understanding all of your options and in connecting you with all possible resources on and off campus.

If you wish to speak with a confidential source, you may contact the counselors at the University Counseling Center at 314-977-TALK. To view SLU's sexual misconduct policy and for resources, please visit the following web address: http://www.slu.edu/general-counsel-home/office-of-institutional-equity-and-diversity/sexual-misconduct-policy www.slu.edu/here4you .

## Student Success Center Syllabi Statements

In an effort to be inclusive of students' learning styles and needs with regard to academic support, the following statement has been developed for use in course syllabi which identifies resources for student support in various areas of learning. As faculty members construct their syllabi for future courses, it is requested that they update materials to include new language regarding academic and career related support offered to students through the Student Success Center.

The syllabus statement will be available throughout the year by visiting the following websites, but we encourage you to place these resources on any departmental websites you feel necessary:

- Student Success Center: www.slu.edu/success
- Reinert Center for Transformative Teaching \& Learning: www.slu.edu/cttl

University of Louisville: https://louisville.edu/music/resources/faculty-staff-resources/revised-syllabi-statement-re-title-ix-clery-act

# Revised Syllabi Statement re Title IX-Clery Act 

Revised 2015 Title IX/Clery Syllabi Statement (6.9.2015)
The following statement should be added to all course syllabi, beginning July 1, 2015.
Title IX/Clery Act Notification

Sexual misconduct (including sexual harassment, sexual assault, and any other nonconsensual behavior of a sexual nature) and sex discrimination violate University policies. Students experiencing such behavior may obtain confidential support from the PEACC Program (852-2663), Counseling Center (852-6585), and Campus Health Services (852-6479). To report sexual misconduct or sex discrimination, contact the Dean of Students (852-5787) or University of Louisville Police (852-6111).

Disclosure to University faculty or instructors of sexual misconduct, domestic violence, dating violence, or sex discrimination occurring on campus, in a University-sponsored program, or involving a campus visitor or University student or employee (whether current or former) is not confidential under Title IX. Faculty and instructors must forward such reports, including names and circumstances, to the University's Title IX officer.

For more information, see the Sexual Misconduct Resource Guide. http://louisville.edu/hr/employeerelations/sexual-misconduct-brochure

Mississippi State University: http://www.hrm.msstate.edu/aaeeo/titleix/

All course syllabi should contain the university's standardized statement on Title IX and sexual misconduct. The statement is:

MSU is committed to complying with Title IX, a federal law that prohibits discrimination, including violence and harassment, based on sex. This means that MSU's educational programs and activities must be free from sex discrimination, sexual harassment, and other forms of sexual misconduct. If you or someone you know has experienced sex discrimination, sexual violence and/or harassment by any member of the university community, you are encouraged to report the conduct to MSU's Director of Title IX/EEO Programs at $\underline{325-8124}$ or by e-mail to titleix $@ m$ mstate.edu. Additional resources are available at http://www.msstate.edu/web/security, or at http://students.msstate.edu/sexualmisconduct/.


## Phased Retirement Policy and Program (Approved by the Board of Trustees)

## Administrative Regulation 3:2

Responsible Office: Executive Vice President for Finance and Administration / Vice President for Associate VP-Human Resources

Date Effective: DRAFT10/16/2007
Supersedes Version: 10/16/20076/12/2007

## Major Topics

## Entities Affected <br> Eligibility <br> Requests for Phased Retirement <br> Terms and Conditions <br> Retirement and Other Employee Benefits

## I. IntroductionPolicy

The Phased Retirement Program ("program") is designed to provide an opportunity for eligible full-time faculty and staff employees to make an orderly transition to retirement through part-time service. It is entirely voluntary and iswill be implemented by written agreement between the faculty or staff employees and the University. The program does not create an absolute right of employees to phased retirement. A decision to request phased retirement rests entirely with the individual employee and shall be granted only when in the best interests of the University.* The Pprogram is ongoing, but may be eliminated at any time by the University.

* NOTE: This is not new language, but was moved from another section. This note will be removed after approval of revisions.)


## II. Entities Affected

This regulation applies to all employees of the University who are eligible for the program in accordance with Section III of this regulation.

## III. Eligibility-and Approval

A. The Phased Retirement Pprogram is available to all full-time faculty and staff employees who have completed fifteen (15) years of full-time service (in accordance with AR 3:1) at the University of Kentucky and who are age sixty (60) or older by the commencement of their phased retirement.
B. Individuals who have already taken regular retirement are not eligible for phased retirement under this pProgram.
B. A decision to request a phased retirement appointment rests entirely with individual employees. Phased retirement that is requested and approved shall commence on the date agreed upon by the employee and the University and recorded in the written agreement.
C. The Phased Retirement Program does not create an absolute right of employees to a phased retirement. Phased retirement appointments must be requested by eligible employees but shall be granted only when such appointments are in the best interests of the University.

## HIV. Requests for Phased Retirement

## A. Faculty Requests

1. The faculty employee is responsible for confirming eligibility for participation by contacting Human Resources.
2. After obtaining verification of eligibility, Aa faculty employee shall submit a written request for a phased retirement appointment-to the educational unit administrator outlining the proposed terms and using the Phased Retirement Agreement form (add Hyperlink to form). The request shall be submitted at least six (6) months before the date upon which the phased retirementsuch appointment would become effective unless the affected educational unit administrator and the dean agree to accept a later submission. The request shall include a completed, signed, and notarized phased retirement agreement and its attendant paperwork.
3. The educational unit administrator shall review the request and, if necessary, meet with the faculty employee to discuss whether any terms of the proposal should to be modified to ensure that the phased retirement is in the best interests of the University. The educational unit administrator shall make a recommendation to the dean. The dean shall review the request and recommendation of the educational unit administrator and make a recommendation to the Provost. The Provost shall have final approval authority.
4. Once all the terms and conditions of the proposed phased retirement are agreed upon, the final Agreement shall be documented using the Phased Retirement Agreement form (add Hyperlink to form). The Agreement is deemed "executed" once all necessary parties have signed the Phased Retirement Agreement form.
B. Staff Requests
5. The staff employee is responsible for confirming eligibility for participation by contacting Human Resources.
6. After obtaining verification of the eligibility, Aa staff employee shall submit a written request for a phased retirement appointment-to the supervisor of the administrative unit to which the employee is assigned using the Phased Retirement Agreement form (add Hyperlink to form). The request shall be submitted at least three (3) months before the date upon which the phased retirement such appointment-would become effective; unless the affected supervisor and appropriate senior administrator agree to accept a later submission. The request shall include a completed, signed, and notarized phased retirement agreement and its attendant paperwork.
7. The supervisor shall review the request and, if necessary, meet with the staff employee to discuss whether any terms of the proposal should to be modified to ensure that the phased retirement is in the best interests of the University. The supervisor shall make a recommendation to the appropriate senior administrator(e.g., vice president or associate vice president). -The senior administrator shall
review the request and recommendation of the supervisor and make a recommendation to the appropriate vice president, executive vice president, Provost, or President. The executive vice president, Provost, or President shall have final approval authority.
8. Once all the terms and conditions of the proposed phased retirement are agreed upon, the final Agreement shall be documented using the Phased Retirement Agreement form (add Hyperlink to form). The Agreement is deemed "executed" once all necessary parties have signed the Phased Retirement Agreement form.

## IV. Terms and Conditions

Phased retirement appointments under this Program shall be subject to the following terms and conditions:
A. Phased retirement appointments-involves a reduction of employment from full-time to part-time, but normally not less than 50 percent full-time equivalency (FTE) and not greater than 80 percent FTE. The employee's workload and schedule during phased retirement shall be determined by agreement between the employee and unit administrator as determined by the Phased Retirement Agreement. For example, phased retirement may consist of reduced course load, fewer hours per day, or fewer days per week.
Such appointments for faculty employees may consist of full-time work for one-half of a regular appointment period (e.g., full-time work for one semester of an academic year appointment) or half-time work for a full regular appointment period (e.g., half-time work in each of the two semesters of an academic year appointment). Instruction, research, and service assignments under such an appointment shall be determined by agreement between the faculty employee and the educational unit administrator and shall be set forth in detail in the written phased retirement agreement. Phased retirement appointments for staff employees shall normally consist of no less than 50 percent FTE throughout the fiscal year or duration of the agreement.
B. The salary of an employee on a-phased retirement appointment-shall be reduced proportional to the reduction in FTEby 50 percent from the salary such employee would have received but for the election of phased retirement under this program. Employees participating in the program electing phased retirement appointments-shall not be eligible for promotion or proportional merit-salary increases during the period of their phased retirement-program.
C. Phased retirement under this program-shall not exceed five (5) years in duration.
D. Employees who request and receive-are approved for participation in the program phased retirement appointments-shall agree in writing to accept full retirement from the University no later than the end of the phased retirement period as determined by the Phased Retirement Agreementive (5) years after the commencement of reduced employment under this program. The agreement to enter into phased retirement and to retire at the end of the reduced employment period is irrevocable once the Phased Retirement Agreement is executed ${ }_{i} \bar{\top}$ however, the percentage of FTE reduction or work schedule during the phased retirement period may be amended by mutual agreement of the employee and unit administrator.
E. except that $n \underline{N}$ othing in this regulation shall preclude employees from electing regular retirement from the University at any point in time during the phased retirement period (even though such employees may have executed an agreement requiring retirement at some point in the future). Nothing in this regulation shall preclude a post-retirement appointment of an individual following phased retirement and regular retirementwho has elected phased retirement under this Program.

FD.Faculty employees participating in the programon phased retirement appointments shall have the same academic freedoms as other faculty and shall be held to the same professional standards responsibilities-as other full-time faculty employees.
G. Faculty and staff employees participating in the programen phased retirement appointments are subject to all University regulations and policies and will-have access to all grievance and appeal procedures available to other employees.

## VI. Retirement and Other Employee Benefits

## A. Retirement Contributions

The University's and employee contributions to University retirement plans for an employee on phased retirement appointment, and the employee's contributions as well, shall be based upon their employee's actual (i.e., reduced) salaries during the period of reduced employment. Employees participating in the electing the Phased Retirement Pprogram may access their retirement plan funds; ithout separating from the University, after the effective-start date of $\underline{\text { initiating their phased retirementparticipation in this }}$ program.
B. Disability Benefits

The calculation of disability benefits for an employee on a phased retirement appointment shall be based on the equivalent of the employee's full-time salary at the onsetprior to entering the program-of the phased retirement appointment.

## C. Life Insurance and Accidental Death \& Dismemberment (AD\&D)

The calculation of policy coverage for basic or optional life insurance and basic AD\&D coverage shall be based on the equivalent of the employee's full-time salary prior to entering the program.

DG. Vacation and Other Leave
The vacation and other leave for an employee on phased retirement shall be reduced proportional to the reduction in FTE. Faculty employees on phased retirement appointments are entitled to fifty percent (50\%) of the paid vacation leave to which they would have been entitled had they not elected phased retirement under this Program. Staff members shall accrue temporary disability leave and vacation leave in proportion to their reduced full-time equivalency (FTE).

## ED. Other Benefits

In all other respects, employees participating in the program on phased retirement appointment shall be are entitled to the employee benefits normally offered to regular full-time employees. Employee privileges, such as parking and reduced-cost athletic tickets, shallwill be made available to employees participating in the programon phased retirement appointments__as if they were on-regular full-time employeesappointments. Requests for travel expenses and support services for employees in the program on phased retirement appointments-shall be considered and evaluated under normal processes. An employee's use and occupancy of office or lab space shall not be adversely affected during the phased retirement periodby electing to accept a phased retirement appointment.

## VI.References and Related Materials

KRS 164.220, Appointment, salaries and retirement benefits of university personnel
GR II, Governance of the University (Board of Trustees)
AR 3:1, University of Kentucky Retirement Plans

## Revision History

AR II-1.6-2: 4/30/1996, 3/4/1997, 12/10/2002, 6/12/2007, 10/16/2007

For questions, contact: Office of Legal Counsel





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[^0]:    iii. Proposed Changes to College of Dentistry "Academic Discipline Policies" and "Miscellaneous Academic Policies"

[^1]:    * Denotes an explained absence.

[^2]:    ${ }^{1}$ Prior to filling out this form, you MUST contact the Associate Provost for Academic Administration (APAA). If you do not know the CIP code, the APAA can provide you with that during the contact.
    ${ }^{2}$ Programs are typically made effective for the semester following approval. No changes will be made effective until all approvals are received.
    ${ }^{3}$ If there is only one plan for the degree, plans involving a thesis (or the equivalent in studio work, etc.) should be discussed under Plan A and those not involving a thesis should be discussed under Plan B.
    Rev 8/09

[^3]:    ${ }_{e}^{4}$ Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council. Rev 8/09

[^4]:    ${ }^{1}$ Note: The Martin School will offer an online Graduate Certificate Program in Public Financial Management as part of the program. This program, a first for the Martin School, will be attractive to students desiring only an introduction of class offerings in public financial management.
    Martin School of Public Policy and Administration - Master of Public Financial Management Proposal

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    ${ }^{2}$ propabs are typicaly mado effective for the semester following appoval. No changes will be made effective until at approvals are reremed.
     nut manher a thesic should be disussed under man B .
    Pomb/09

[^6]:    ${ }^{4}$ Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council. Rev:/09

[^7]:    ${ }^{1}$ Online Certificate Tuition based on in-state tuition \$596/credit hour
    ${ }^{2}$ As required by Distance Learning Programs
    \$10/credit
    ${ }^{3}$ In-state tuition required for all online programs.
    ${ }^{3}$ Based on 2015-16 in-state tuition rate of \$5,384/semester
    ${ }^{4}$ Program Director will teach 2 courses annually starting in Year 2

[^8]:    ${ }^{1}$ Moses, H., Matheson, D., Dorsey, E., George, B., Sadoff, D., and Yoshimura, S. The Anatomy of Health Care in the United States. Journal of the American Medical Association, November 13, 2013; 310(18): 1947-1963.
    ${ }^{2}$ Yong, P., Saunders, R., and Olsen, L., (editors). The Healthcare Imperative: Lowering Costs and Improving Outcomes Workshop Series Summary, Institute of Medicine Roundtable on Evidence-Based Medicine. Washington, DC: National Academies Press; 2011.
    ${ }^{3}$ Prybil, L., Ackerman, K., Hastings, D., and King, J. The Evolving Accountability of Nonprofit System Boards. Chicago, Illinois: AHA Center for Healthcare Governance; 2013:5.

[^9]:    ${ }^{4}$ Karash, J., Investing in Value-Based Health Care. Hospitals and Health Networks. May 1, 2013; 87:(5):54-58; and Numerof, R., Making the Transition from Volume to Value. Chicago, Illinois: AHA Center for Healthcare Governance; 2013: 11-17.

[^10]:    ${ }^{5}$ The accounting and economics prerequisite courses (ACC 201/202 and ECO 201/202) are available online with flexible start and end dates so they can be completed by students on their own schedule and at their own pace.

[^11]:    ${ }^{6}$ Coundis use this space to indicate approval of revislons made subsequent to that countli's approval, it deemed necessay hy the rensing counctl.

[^12]:    ${ }^{1}$ Prior to filling out this form, you MUST contact the Associate Provost for Academic Administration (APAA). If you do not know the CIP code, the (APAA) can provide you with that during the contact.
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[^13]:    ${ }^{3}$ Note that MA 109 is NOT approved as a Quantitative Foundations course, Students in a major requiring calculus will use a calculus course (MA

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[^16]:    ${ }^{3}$ Note that MA 109 is NOT approved as a Quantitative Foundations course. Students in a major requiring calculus will use a calculus course (MA $113,123,137$ or 138 ) while students not requiring calculus should take MA 111, PHI 120 or another approved course.

[^17]:    ${ }^{4}$ Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.

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[^21]:    University of Kentucky is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate, baccalaureate, masters, and doctorate degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, call 404-679-4500, or online at www.sacscoc.org for questions about the accreditation of University of Kentucky.

[^22]:    ${ }^{1}$ Prior to filling out this form, you MUST contact the Associate Provost for Academic Administration (APAA). If you do not know the ClP code, the (APAA) can provide you with that during the contact.
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