### University Senate Agendas, 2011-2012

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All meetings are from 3:00 - 5:00 pm in the Auditorium of W. T. Young Library unless otherwise noted.

## Monday, December 12, 2011

- 1. Update on Current and Future Initiatives President Eli Capilouto
- 2. Minutes from November 14 and Announcements p. 3-7
- 3. Officer and Other Reports
  - a. Chair
  - b. Update on Document Handling System Anna Bosch, College of Arts and Sciences Associate

Dean

- c. Vice Chair
- d. Parliamentarian
- e. Trustee Peek

## 4. Academic Calendars

- a. 2012 2013 Calendar p. 8-20
- b. 2014 2015 Calendar, Tentative p. 21-33
- c. 2012-2013 Dentistry p. 34-35
- d. 2014 2015 Dentistry, Tentative p. 36-37
- e. Fall 2012 Law p. 38
- f. Spring 2013 Law p. 39
- g. Summer I (four-week) 2013 Law p. 40
- h. Summer 2013 Law p. 41
- i. Fall 2014 Law, Tentative p. 42
- j. Spring 2015 Law, Tentative p. 43
- k. Summer I (four-week) 2015 Law, Tentative p. 44
- 1. Summer 2015 Law, Tentative p. 45

#### University Senate Agendas, 2011-2012

All meetings are from 3:00 - 5:00 pm in the Auditorium of W. T. Young Library unless otherwise noted.

- m. 2012 2013 Medicine p. 46-48
- n. 2014 2015 Medicine, Tentative p. 49-51
- o. 2012 2013 Pharmacy p. 52-54
- p. 2014 2015 Pharmacy, Tentative p. 55-57
- q. 2012 2013 Winter Intersession p. 58
- r. 2014 2015 Winter Intersession, Tentative p. 59
- 5. Establishment of Senate Committee to serve as Faculty of Record for the Honors Program p. 60
- 6. Committee Reports
  - a. Senate's Academic Programs Committee Andrew Hippisley, Chair
    - i. Proposed New Graduate Certificate in International Education p. 61-72
  - b. Senate's Academic Planning and Priorities Committee (SAPPC) Walter Ferrier, Chair
    - i. Update on Current Activities
  - c. Interim General Education Oversight Committee (IGEOC) Bill Rayens, Chair
    - i. Report to the Senate
  - d. Addition to agenda: 6.d Senate's Academic Organization and Structure Committee Herman Farrell, Chair
    - *i.* (*Proposed New Institute for Sustainable Manufacturing*) p. 73-109
- 7. "We Are Student Affairs" Vice President for Student Affairs Robert Mock

## Next Meeting: February 13, 2012

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## University Senate November 14, 2011

The University Senate met in regular session at 3 pm on Monday, November 14, 2011 in the Auditorium of W. T. Young Library. Below is a record of what transpired. All votes were taken via a show of hands unless indicated otherwise.

Chair Hollie I. Swanson called the University Senate (Senate) meeting to order at 3:02 pm. She offered a presentation to facilitate the meeting.

## 1. Minutes from October 10, 2011 and Announcements

The Chair explained that a motion was needed to waive *Senate Rules 1.2.3* (*SR 1.2.3*) to allow the Senate to consider the agenda, etc. because those items were not sent out six days in advance.

Brion **moved** that the Senate waive *Senate Rules 1.2.3* to allow consideration of the agenda, etc. for November 14, 2011 and Wasilkowski **seconded**. <u>The motion **passed** with none opposed</u>.

The Chair said that a couple of grammatical corrections to the Senate minutes from October were received. McCormick **moved** to approve the minutes from October 10, 2011 and Fiedler **seconded**. A **vote** was taken and the motion **passed** with none opposed.

The Chair offered a variety of announcements to senators.

- Volunteers are needed for four campuswide committees (Tobacco-Free Campus Advisory Committee, Staff Performance Evaluation Review Committee, and two Work-Life Advisory Committees Career Development Committee and Burnout Committee).
- Two web transmittals are currently posted, containing about 60 courses and 13 programs.
- Additional course submissions are needed for the UK Core areas of Inquiry in the Humanities and Inquiry in the Social Sciences. Please consider submitting courses for these two areas, particularly at the 300- and 400-level.
- The Senate Council (SC) deliberated on proposed changes to *SR 1.3.1.3.A* ("Senate Council Chair") and reviewed alternate language from Blonder and Wood. The revised language has been sent to the Senate's Rules & Elections Committee to draft possible rule language.
  - Highlights include: senators nominate eligible SC members for Chair; nominees can submit 200-word election statement; senators invited to offer opinions on candidates via email to the SC; SC members review input from senators and elect SC chair; and the creation of "chair elect" position.
- Two elections will be held in December, one for the SC chair position and one for members of the SC.
- The Chair introduced Staff Senate Chair Michael Adams (Arts and Sciences, Department of Biology). Guest Adams spoke about two Staff Senate initiatives the CRISIS program (Crisis

Relief in Situations Involving Staff) and efforts joint efforts with Human Resources to create an anti-bullying/anti-harassment policy for employees.

- The document handling system pilot is moving along in the College of Arts and Sciences (AS). Faculty have been submitting electronic forms and most forms now are waiting on department approval. It is early in the transition, but going well.
- There will be an Association of American University Professors (AAUP) meeting on Saturday, November 19 in the W. T. Young Library Auditorium from 1 - 5 pm. The intent is to create a new chapter of the AAUP.
- There is a new Experts Page on UKNOW. It is a list of employee experts (organized by topic) who are willing to talk to the public & media. Individuals interested in being listed may request that their name be added.

## 2. Officer and Other Reports

## a. Chair's Report

The Chair reported that she and another faculty member took eight biomedical graduate students to an A&S Wired coffee chat. The objectives were to develop cross-campus, student-focused collaborations; provide an opportunity for young scientists to practice public speaking; and develop a pilot for possible implementation of the Quality Enhancement Plan (QEP). All the students enjoyed the interactions. The Chair then asked the QEP team for insight into how she could have incorporated multi-modal communication across the curriculum with that event, and received some suggestions.

The Chair then offered some information regarding recent SC activities. Most recently, Provost Subbaswamy asked the SC to form a committee to recommend a redrafting of the *Administrative Regulations* (*ARs*) on faculty post-tenure accountability and productivity reviews. The SC expressed concerns that the role of the faculty was not clearly defined and requested that a similar endeavor be initiated to focus on administrative activities. The SC met again with the Provost, this time to obtain clarity. The Chair then met with President Capilouto to discuss the need for an examination of administrative activities. He is currently reviewing the structure of his office and will discuss his plans with senators at the December Senate meeting.

In the meantime, the President asked the Chair to meet with Associate Vice President of Human Resources Kim Wilson, Vice President of Financial Operations and Treasurer Angie Martin, and Director of Institutional Research Roger Sugarman to determine key issues that need to be addressed if there is to be an examination of administrative activities. The Chair invited feedback from senators.

Trustee Joe Peek and the Chair <u>are working worked</u> together to create <u>five</u> activity <u>"groups" classifications in order to clarify how many administrators UK has</u>: purely administrative activities; faculty administrative activities; instructional activities; instruction/student-centered support activities; and non-instructional support activities. The intent is to try to place personnel on campus into one of the five groups to determine the amount of administrative activities that are occurring on campus. The Chair said she would report back to the Senate as information becomes available. After a an additional comment, the Chair agreed that "instructional" should be modified to "educational" to better encompass the research mission.

Senators were interested in how the data would and could be used, particularly with respect to comparisons to other universities. It was acknowledged by a few different individuals that universities typically use customized definitions of employment categories, so comparison across universities is somewhat difficult. Grossman suggested checking on the categories/groups used by the seven benchmarks identified by the Executive Review Committee.

## i. Q&A with Bill Swinford, President's Chief of Staff

The Chair introduced Guest Swinford to senators. Swinford spoke to senators about his conviction that President Capilouto is the right person for the job and the areas the President is focused on in the short term (undergraduate education and facilities). Afterward he took a variety of questions from senators, including the following:

- What is UK doing to ensure that an episode like what occurred at Penn State would not happen at UK?
- What type of control would UK give up if it engages in a public/private partnership for a new residence hall, classroom building, etc.?
- Will new buildings be LEED (Leadership in Energy and Environmental Design) certified?
- Will faculty be involved in the design of educational space in residence halls?
- Would data from Integrated Postsecondary Education Data System (IPEDS) help in the review of administrative activities?
- What is the current status of the employment ombud proposal?

Swinford answered senators' questions to their satisfaction. When there were no further questions, he said he was happy to attend any Senate meeting, particularly if the President cannot attend. He offered senators his email address and said he was happy to respond to any inquiries. The best way for things to work is for the faculty and administration to stay on the same page. The Chair thanked Swinford and he returned to his seat.

## d. Trustee Report

Faculty Trustee Joe Peek offered an update on Board-related activities, including the topics below.

- UK recently sent out a Request for Proposals (RFP) for a new dormitory.
- Shortly before the last Board of Trustees meeting, Board members heard from students during a committee meeting about UK's reliance on coal usage. As a result, UK's Vice President for <a href="#">Facilities</a> Bob Wiseman will be taking a couple of those students to Ball State for a fact-finding trip on use of geothermal energy at UK.
- Peek believes there will be structural reorganizations at UK, largely due to changes in funding and how UK budgets.

• A few of UK's endowments are under water. Negotiations are underway with the Council on Postsecondary Education (CPE) on the best way to move forward. Peek said that he was more concerned about the decreased payouts in the future.

There were a variety of questions from senators, primarily pertaining to UK's endowment and how to learn more about UK's endowment practices, as well as possible structural reorganizations.

## c. Parliamentarian's Report

Senate Parliamentarian J. S. Butler reminded senators that by virtue of them being presented, committee reports are automatically received by the Senate. If someone wishes to make a committee report <u>a Senate document, part of the Senate</u>, a senator should move to adopt the report.

## 3. UK's December 2011 Degree List

The Chair reported that as a result of faculty oversight, one PhD student was removed, one PhD student was added and two DNP students were added.

Jones **moved** that the elected faculty senators approve UK's December 2011 degree list, for submission through the President to the Board of Trustees, as the recommended degrees to be conferred by the Board. D. Anderson **seconded**. There being no discussion, a **vote** was taken and the motion **passed** with none opposed.

## 4. <u>Program Assessment Overview - Mia Alexander-Snow, Director of Planning and Institutional</u> <u>Effectiveness</u>

Guest Mia Alexander-Snow offered a presentation that offered an overview of program assessment. When she was finished, there was a question among senators about how to find the results of various program assessments. Alexander-Snow explained that such reports were usually kept within a department, but the Senate could request other ways of disseminating information. Interim Vice President for Institutional Research, Planning and Effectiveness Heidi Anderson said that she and Alexander-Snow would talk with the Chair about possibly posting program assessment reports online.

## 5. Committee Reports

## a. Senate's Advisory Committee on Privilege and Tenure (SACPT) – Jim Geddes, Chair

## i. SACPT 2010 – 2011 Final Report

The Chair noted that Geddes was out of town, so Wasilkowski, a committee member during 2010 - 2011 gave the report to senators. Wasilkowski offered a brief description of the cases reviewed, as well as the recommendations. D. Jones clarified for senators that one recommendation (regarding the amount of time a faculty member has to get information to the SACPT being limited to 75 days) from the SACPT had been sent to the Senate's Rules and Elections Committee for codification into the *SR*.

## b. Faculty Evaluation of the President

SC member Mark Coyne offered senators a brief presentation on the recent invitation that the SC develop an improved method of evaluating the president. He explained that a small ad hoc group (himself and Wasilkowski) have been working on a template of questions to be delivered to faculty in the form of a survey. He noted that his comments and some proposed questions were posted on the Senate's website. Coyne added that the questions were very preliminary in nature and urged senators to offer input into the questions. He said it was also a way to inform the Board about what questions the Board should ask when evaluating the president.

Coyne again invited senators to contact himself or Wasilkowski with any input. He confirmed for Watkins that the effort was very much something that should be shared with constituents. A question was asked regarding evaluation of the provost and the Chair said she would inquire into that possibility. In response to a request, the Chair said that the details could be summarized and emailed to senators to help facilitate sharing the information with colleagues.

The Chair said that when the time was appropriate, she would share the results with Board Chair Britt Brockman.

## 6. Executive Review Committee Report

The Chair (who also chaired the Executive Review Committee) offered a presentation to senators, similar to what she offered to Board members during the Board's retreat. Senators asked a variety of questions.

When there were no additional questions, Brion **moved** that the report be adopted as part of the official Senate record. Wasilkowski **seconded**. There being no discussion, **vote** was taken and the motion **passed** with none opposed.

The Chair noted that she meets monthly with President Capilouto and is happy to pass information, etc. along to the President.

A few minutes after 5 pm, Grossman **moved** to adjourn – there were no objections.

Respectfully submitted by Robert Grossman, University Senate Secretary

Invited guests present: Michael Adams, Mia Alexander-Snow and Bill Swinford.

Absences: Adams; Allison; Anstead; Atwood; Badger; Ballard; Bausch; Bensadoun; Birdwhistell; Blackwell<sup>\*</sup>; Brennan; Capilouto; Davis; de Beer; Debski; DeWall<sup>\*</sup>; Duncan; Eckman; Feddock<sup>\*</sup>; Feist-Price; Ferrier<sup>\*</sup>; Fielden; Geddes; Getchell; Hackbart; Harris; Hazard<sup>\*</sup>; Heller<sup>\*</sup>; Hulse<sup>\*</sup>; Jackson; Jasper<sup>\*</sup>; Kirk; Kirschling<sup>\*</sup>; Kornbluh<sup>\*</sup>; Lester; Martin<sup>\*</sup>; Mazur; Mock; Morris<sup>\*</sup>; Mountford; Mullen<sup>\*</sup>; Newman; O-Hair, D.; O'Hair, MJ; Payne<sup>\*</sup>; Peek; Richey; Rieske-Kinney<sup>\*</sup>; Schroeder; Sekulic<sup>\*</sup>; Shannon, Smith; Speaks; Stombaugh; Subbaswamy; Tick; Tracy, J; Tracy, T; Turner; Voro; Wells; Wiseman; Witt; Wyatt<sup>\*</sup>; Yost<sup>\*</sup>

Prepared by Sheila Brothers on Tuesday, December 6, 2011.

<sup>\*</sup> Denotes an absence explained prior to the meeting.

#### UNIVERSITY CALENDAR 10-30-11 VERSION

February	1	Wednesday - Deadline for submission of all application materials, College of Medicine, for the 2012 Fall Semester
February	1	Wednesday - Deadline for submission of all application materials For the School of Interior Design
February	15	Wednesday - Priority deadline for freshman applicants seeking admission to the Fall Semester.
February	15	Wednesday - Priority filing deadline for the 2012-2013 academic year for financial aid for entering freshmen
February	28	Tuesday - Last day for filing an application for an August 2012 undergradute degree online in myUK
March 1		Thursday - Deadline for all applicants to the School of Architecture (College of Design)
March 15		Thursday - Deadline for international applications to be submitted to the Graduate School for the 2012 fall semester
March 15		Thursday - Priority filing deadline for the 2012-2013 academic year for financial aid for continuing and transfer students
March 26- April 17	-	Monday through Tuesday - Priority Registration for Fall 2012
April 1		Sunday - Deadline for NAAB Architecture transfer applicants
April 15		Sunday - Deadline for applying with college deans for reinstatement after a second academic suspension for the
		2012 Fall Semester
April 21-	-	Saturday through Thursday - Add/Drop for registered
June 7		students
May 11		Friday - Deadline for students to schedule an appointment for reinstatement in all colleges for the 2012 fall semester
May 15		Tuesday - Deadline for undergraduate international applicants to submit 2012 Fall Semester application
June 15		Friday - Earliest date to submit application for regular and Early Decision Program admission, College of Medicine, for the 2013 Fall Semester
June 18- July 13		Monday-Friday-Summer Advising Conferences for new freshmen,transfer, students, and readmitted students enrolling for the 2012 Fall Semester
June 21-		Thursday-Thursday-Approved time period to apply online in
Sept. 20		myUK for a Dec. 2012 degree from the Graduate School
June 30		Saturday-Last day for filing an application for a December 2012 undergraduate degree online in myUK
July 13-		Friday through Saturday - Add/Drop for registered
August 18	3	students
July 20		Friday - Deadline for applying for admission to the Graduate School for the 2012 Fall Semester.
August 1		Wednesday - Final deadline for submission of all required documents to the Office of Admissions for undergraduate admission, for the 2012 Fall Semester, excluding freshmen who will be considered on a space-available basis.

August 1	Wednesday - Deadline for application for Early Decision Program, College of Medicine, for the 2013 Fall Semester
August 1	Wednesday - Last day for students in the Employee Educational Program registered through August 1 to submit EEP form to Human Resource Services to confirm 2012 Fall Semester registration and tuition waiver
August 14-2	
August 14-2	
August 15	Wednesday - Deadline for international applications to be submitted to the Graduate School for the 2013 spring semester
August 16-2	0 Thursday through Monday - Fall registration for new post- baccalaureate students admitted for the First Summer Session, Second Summer Session or Fall Semester
August 17	Friday - Advising Conference and Registration for new international students
August 17-2	5 Friday through Saturday - K week for all new undergraduate students
August 20	Monday - Advising Conference and Registration for new freshmen and transfer students including registration for Evening and Weekend
August 20-2	
August 21	Tuesday - Advising Conference and Registration for readmission,and non-degree students including Evening and Weekend
August 21	Tuesday - Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
August 22	Wednesday - Payment deadline of registration fees and/or housing and dining fees-if total amount due is not paid as indicated on the account statement, a late payment fee of 1.25% of the amount past due will be assessed
August 22	Wednesday - First day of classes
August 22- August 28	Wednesday through Tuesday - Late registration for returning students who did not priority register and new applicants cleared late for admission. A late fee is assessed students who register during this time period
August 28 August 28	Tuesday - Last day to add a class for the 2012 Fall Semester Tuesday - Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund
August 28	Tuesday - Last day for students in the Employee Educational Program who registered and/or changed schedules after August 1 to submit EEP form to Human Resource Services to confirm 2012 Fall Semester registration and tuition waiver

September 3	Monday - Labor Day - Academic Holiday
September 12	Wednesday - Last day to drop a course without it
	appearing on the student's transcript
September 12	Wednesday - Last day to change grading option (pass/fail
	to letter grade or letter grade to pass/fail; credit to
	audit or audit to credit)
September 19	Wednesday - Last day to officially withdraw from the
	University or reduce course load and receive a 50 percent refund
September 20	Thursday - Last day to submit Application for Degree
September 10	(graduate students) to a receive a December (Fall) 2012
	degree. The Application for Degree is valid for the term
	of the request. To apply online go to my UK, myRecords,
	and then Apply for a Degree
September 20	Thursday - Last day for doctoral candidates for a
	December degree to submit a Notification of Intent to
September 20	schedule a final examination in The Graduate School Thursday - Deadline for submission of application and all
September 20	required documents to the Office of Undergraduate
	Admission and University Registrar for change of
	residency status for 2012 Fall Semester
October 1-	Monday through Wednesday - Students are prohibited from
November 21	changing academic majors
October 8-	Monday through Friday - Midterm grading window is open.
October 19	The mid-term grading window will close at midnight on Oct. 19
October 15	Monday - Deadline for submission of application and all
00000001 15	required documents to the Office of Admissions for
	undergraduate applicants planning to attend November
	Advising Conference (including registration for spring
	classes)
October 15	Monday - Midterm of 2012 Fall Semester
October 29- November 20	Monday through Tuesday - Priority registration for the 2013 Spring Semester
November 1	Thursday - Deadline for completed AMCAS application,
NOVEIIDEL I	College of Medicine, for the 2013 Fall Semester
November 2	Friday - Last day to withdraw from the University or
	reduce course load. Students can withdraw or reduce
	course load after this date only for urgent non-academic
	reasons
November 6	Tuesday- Presidental election day
November 15	Thursday - Last day for candidates for a December degree to schedule a final examination in The Graduate School
November 16	Friday - 2013 Spring Semester Advising Conference for new
	and readmitted undergraduate students
November 21-24	Wednesday through Saturday - Thanksgiving - Academic
	Holidays

2012 Fall Semester

November December November	17	Wednesday through Monday - Add/Drop for registered students for the 2013 Spring Semester Thursday - Application deadline for undergraduate
NOVEILDET	29	admission to the Spring 2013 term
November	29	Thursday - Last day for candidates for a December graduate degree to sit for a final examination
November	30	Friday-Last day for filing an application for a May 2013 undergraduate degree online in myUK
December	1	Saturday - Deadline for submission of application and receipt of all materials for admission, readmission or transfer to the College of Law for the 2013 Spring Semester
December	3	Monday - Deadline for applying for admission to the Graduate School for the 2013 Spring Semester.
December	3-	Monday through Monday - Final grading window is open. The
December	17	final deadline for submission of grades online in the grading portal is midnight, Dec. 17
December	5	Wednesday - Last day for students in the Employee Educational Program registered through December 5 to submit EEP form to Human Resource Services to confirm 2013 Spring Semester registration and tuition waiver
December	7	Friday - Last day of classes
December December		Monday through Friday - Final Examinations Friday - Last day for candidates for a December degree to submit a thesis/dissertation to The Graduate School
December December		Friday - End of 2012 Fall Semester Friday - December Commencement

SUMMARY OF TEACHING DAYS, FALL SEMESTER 2012

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Teaching Da	ys
August	1	1	2	2	2	1	August	9
September	3	4	4	4	4	5	September	
October	5	5	5	4	4	4	October	27
November	4	3	3	4	4	3	November	21
December Totals	1 14	1 14	1 15	1 15	1 15	1 14	December	6 87

February 15 2012 March 15 2012	Wednesday - Priority filing deadline for the 2012-2013 academic year for financial aid for entering freshman Thursday - Priority filing deadline for the 2012-2013 academic year for financial aid for continuing and transfer students
August 15 2012	Wednesday - Deadline for international applications to be submitted to The Graduate School for the 2013 Spring Semester
September 15 2012	Saturday - Deadline for applying with college deans for reinstatement after a second academic suspension for the 2013 Spring Semester
September 21- Feb. 20 October 1 2012	Friday-Wednesday-Approved time period to apply online in myUK for a May 2013 degree from the Graduate School Monday - Deadline for students to schedule an appointment for reinstatement in all colleges for the 2013 spring semester
October 15 2012	Monday - Deadline for submission of application and all required documents to the Office of Admissions for undergraduate applicants planning to attend November Advising Conference (including registration for spring classes)
October 15 2012 November 16 2012 November 28- December 17	Monday - Deadline for undergraduate international applicants to submit 2013 Spring Semester application Friday - 2013 Spring Semester Advising Conference for new and readmitted undergraduate students Wednesday through Monday - Add/Drop for registered students for the 2013 Spring Semester
2012 November 30 2012 December 1 2012	Friday - Last day for filing an application for a May 2013 undergraduate degree online in myUK Saturday - Final deadline for submission of application and all required documents to the Office of Undergraduate
December 2	Admission and University Registrar for the 2013 Spring Semester. Monday - Deadline for applying for admission to the Graduate
December 3 2012 December 5 2012	School for the 2013 Spring Semester. Wednesday - Last day for students in the Employee Educational Program registered through December 5 to submit EEP form to Human Resource Services to confirm
January 2-5	2013 Spring Semester registration and tuition waiver Wednesday through Saturday - Add/Drop for registered students
January 2-7	Wednesday through Monday - Registration for new program graduate students
January 3-7	Thursday through Monday - Registration for new post- baccalaureate students
January 4 January 7	Friday - International Student Advising Conference Monday - Advising Conference and Registration for new freshmen and transfer students including registration for Evening and Weekend

## UNIVERSITY CALENDAR 10-30-11

January 7-	-8	Monday and Tuesday - Opening-of-term add/drop for
January 8		registered students Tuesday - Advising conference and Registration for readmission and non-degree students including registration for Evening and Weekend
January 8		Tuesday - Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
January 9		Wednesday - First day of classes
January 9-		Wednesday through Tuesday - Late registration for
T 11	F	returning students who did not priority register and new applicants cleared late for admission. A late fee is assessed students who register during this time period
January 15	S	Tuesday - Deadline for submission of all application materials, College of Medicine, for the Fall 2013 Semester
January 15	5	Tuesday - Last day to add a class for the 2013 Spring Semester
January 15	5	Tuesday - Last day to officially withdraw from the
-		University or reduce course load and receive an 80 percent refund
January 15	5	Tuesday - Last day for students in the Employee
		Educational Program who registered and/or changed
		schedules after December 5 to submit EEP form to Human Resource Services to confirm 2013 Spring Semester
		registration and tuition waiver
January 21	1	Monday - Martin Luther King Birthday - Academic Holiday
January 22	2	Tuesday - Payment deadline of registration fees and/or
		housing and dining fees Wednesday -if total amount due is not paid as indicated on the account statement, a late
		payment fee of 1.25% of the amount past due will be
		assessed
January 30	0	Wednesday - Last day to drop a course without it
	~	appearing on the student's transcript
January 30	0	Wednesday - Last day to change grading option (pass/fail to letter grade or letter grade to pass/fail; credit to
		audit or audit to credit)
February 1	1	Friday - Preferred deadline for submitting application
		for admission to the College of Dentistry for the 2013
February 6	6	Fall Semester Wednesday - Last day to officially withdraw from the
rebruary (	0	University or reduce course load and receive a 50 percent refund
February 7	7	Thursday - Deadline for submission of application and all
I COLUCITY	,	required documents to the Office of Undergraduate
		Admissions and University Registrar for change of
		residency status for 2013 Spring Semester

February 20	Wednesday - Last day for doctoral candidates for a May degree to submit a Notification of Intent to schedule a final examination in The Graduate School
February 20	Wednesday - Last day to submit application for degree (graduate school) to receive a May (spring) 2013 degree
Februay 25- March 8	Monday through Friday - Midterm grading window is open. The mid-term grading window will close at midnight on March 8
Feb. 25- April 17	Monday-Wednesday - Students are prohibited from changing academic majors
February 28	Thursday - Last day for filing an application for an August 2013 undergraduate degee online in myUK
March 1	Friday - Last day for submission of application for admission to the College of Law for the 2013 Fall Semester
March 4 March 11-16	Monday - Midterm of 2013 Spring Semester Monday through Saturday - Spring Vacation - Academic Holidays
March 14	Thursday - Deadline for international applications to be submitted to The Graduate School for the 2013 Fall Semester
March 25-	Monday through Tuesday - Priority registration for the
April 16	2013 Fall Semester and both 2013 Summer Sessions
April 5	Friday - Last day for candidates for a May degree to schedule a final examination in The Graduate School
April 5	Friday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for urgent non-academic reasons.
April 8	Monday - Deadline for applying for admission to the Graduate School for the 2013 four-week Summer Session.
April 18	Thursday - Last day for candidates for a May graduate degree to sit for a final examination
April 22-	Monday through Monday - Final grading window is open. The
Мау б	final deadline for submission of grades online in the grading portal is midnight, May 6
April 26	Friday – Last day of classes
April 29-	Monday through Friday - Final Examinations
May 3	
April 30-	Tuesday through Monday - Four-Week Intersession
Мау б	registration and add/drop continue for students enrolled in the 2013 Spring Semester
April_30-	Tuesday through Wednesday - Eight-Week Summer Session
June 5	registration and add/drop continues for students enrolled in the 2013 Spring Semester
April 30-	Tuesday through Saturday - Add/Drop for priority
June 15	registered students for the 2013 Fall Semester
May 3	Friday - Last day for candidates for a May degree to submit a thesis/dissertation to The Graduate School
May 3	Friday - End of 2013 Spring Semester
May 5	Sunday - Commencement
May 6-	Monday-Saturday - College of Pharmacy 15-Week Summer Term
August 17	

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Teaching	
Days								
January	2	3	4	4	3	3	January	19
February	4	4	4	4	4	4	February	24
March	3	3	3	3	4	4	March	20
April	4	4	4	4	4	3	April	23
May	-	-	-	-	-	-	May	0
Totals	13	14	15	15	15	14	_	86

SUMMARY OF TEACHING DAYS, SPRING SEMESTER 2013

2013 Four-Week - First Summer Session

Feb. 21-Thursday-Thursday-Approved time period to apply online June 20 in myUK for an August 2013 degree from the Graduate School February 28 Thursday - Last day for filing an application for an August 2013 undergraduate degree online in myUK Friday - Priority filing deadline for financial aid March 15 for the first summer session and/or the second summer session April 5 Friday - Deadline for applying for admission to the Graduate School for the 2013 Four-Week Summer Intersession. April 15 Monday - Final deadline for submission of application and all required documents to the Office of Admissions for undergraduate admission for the 2013 first summer session April 30-Tuesday through Monday - First summer session registration and add/drop continue for students enrolled May 6 in the 2013 Spring Semester May 6 Monday - Beginning of College of Pharmacy 15-Week Summer Term May 6 Monday - Advising Conference and Registration for new and readmitted students Monday - Deadline for applying for admission to the May 6 Graduate School for the 2013 Eight-Week Summer Session. Tuesday - Last day a student may officially drop a course May 7 or cancel registration with the University Registrar for a full refund of fees Tuesday - First day of classes May 7 May 7-8 Tuesday through Wednesday - Late registration for returning students not already registered and new applicants cleared late for admission. A late fee is assessed students who register late May 8 Wednesday - Last day to add a class for the 2013 First summer session Wednesday - Last day to officially withdraw from the May 8 University or reduce course load and receive an 80 percent refund May 8 Wednesday - Last day for students in the Employee Educational Program to submit EEP form to Human Resource Services for tuition waiver for the 2013 First summer session May 13 Monday - Last day to drop a course without it appearing on the student's transcript May 13 Monday - Last day to change grading option (pass/fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit

2013 Four-Week - First Summer Session

May 14	Tuesday - Last day to officially withdraw from the University or reduce course load and receive a 50 percent refund
May 15-	Wednesday through Wednesday - Second summer session
June 5	registration and add/drop for students who entered the University in the 2013 first summer session
May 20	Monday - Midterm of 2013 Four-Week Intersession
May 20	Monday - Last day for doctoral candidates for an August degree to submit a Notification of Intent to schedule a final examination in The Graduate School
May 22	Wednesday - Payment deadline of registration fees and/or housing and dining fees-if total amount due is not paid as indicated on the account statement, a late payment fee of 1.25% of the amount past due will be assessed
May 22	Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons."
May 27	Monday - Memorial Day - Academic Holiday
May 27-	Monday through Friday - Final grading window is open. The
June 7	final deadline for submission of grades online in the Grading portal is midnight, June 7
June 4	Tuesday - Final Examinations
June 4	Tuesday - End of 2013 Four-Week Intersession
June 5	Wednesday - Deadline for submission of application and all required documents to the Office of Undergraduate Admission and University Registrar for change of residency status for the Four-Week and the Eight-Week Summer Sessions

SUMMARY OF TEACHING DAYS, 2013 FOUR-WEEK INTERSESSION

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Teaching Days
May June	2 1 2	4 1	4 -	4	4	3 1	May 21 June 3
Totals	3	5	4	4	4	4	24

2013 Eight-Week - Second Summer Session

February 28	Thursday - Last day for filing an application for an August 2013 undergraduate degree online in myUK
March 15	Friday - Priority filing deadline for financial aid for the 4 week and/or the 8 week summer term(s)
April 30- June 6	Tuesday through Thursday - Eight-Week Summer Session registration and add/drop continue for students enrolled in the 2013 Spring Semester
Мау б	Monday - Deadline for applying for admission to the Graduate School for the 2013 Eight-Week Summer Session.
May 15	Wednesday - Final deadline for submission of application and all required documents to the Office of Admissions for undergraduate admission for the 2013 Eight-Week Summer Session.
May 15-	Wednesday through Wednesday - Eight-Week registration and
May 29	add/drop for students who entered the University in the 2013 Four-Week Intersession
June 4-5	Tuesday and Wednesday - Registration for new graduate students
June 5	Wednesday - Advising Conference and Registration for new and readmitted students including registration for Evening and Weekend
June 5	Wednesday - Deadline for submission of application and all required documents to the Office of Undergraduate Admission and University Registrar for change of residency status for the Eight-Week Summer Session
June 6	Thursday - Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
June 6	Thursday - First day of classes
June 6-7	Thursday through Friday - Late registration for returning students not already registered and new applicants cleared late for admission. A late fee is assessed students who register late
June 7	Friday - Last day to enter an organized class for the 2013
June 7	Eight-Week Summer Session Friday - Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund

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2013 Eight-Week - Second Summer Session

June	7	Friday - Last day for students in the Employee Educational Program to submit EEP form to Human Resource Services for tuition waiver for the 2013 Eight-Week
		Summer Session
June	15	Saturday - Deadline for international applications to be submitted to The Graduate School for the 2013 Spring Semester
June	17	Monday - Last day to drop a course without it appearing on the student's transcript
June	17	Monday - Last day to change grading option (pass/fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit)
June	17-	Monday-Friday - Summer Advising Conferences for new
July		freshmen, Community College transfers, advanced standing (transfer) students, auditors, non-degree and readmitted students enrolling for the 2013 Fall Semester
June	20	Thursday - Last day to officially withdraw from the University or reduce course load and receive a 50 percent refund
June	20	Thursday - Last day for doctoral candidates for an August degree to submit a Notification of Intent to schedule a final examination in The Graduate School
June	20	Thursday - Last day for notification and last day to apply for Aug. 2013 degree in Graduate School
June	22	Saturday - Payment deadline of registration fees and/or housing and dining fees - if total amount due is not paid as indicated on the account statement, a late payment fee of 1.25% of the amount past due will be assessed
June	30	Sunday-Last day for filing an application for a December 2013 undergraduate degree online in myUK
July	4	Thursday - Independence Day - Academic Holiday
July		Friday - Midterm of 2013 Eight-Week Summer Session
July		Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic
July	10	reasons." Wednesday - Last day for candidates for an August degree
July		to schedule a final examination in The Graduate School Monday - Deadline for applying for admission to the
-		Graduate School for the 2013 Fall Semester.
July	24	Wednesday - Last day for candidates for an August graduate degree to sit for a final examination
July	24-	Wednesday through Monday Final grading window is open.
Augu		The final deadline for submission of grades online in the Grading portal is midnight, August 5
Augu	st 1 st 1	Thursday - End of 2013 Eight-Week Summer Session Thursday - Last day for candidates for an August degree to submit a thesis/dissertation to The Graduate School
-	st 1	Thursday - Final Examinations
Augu	st 2	Friday - Last day for students in the Employee Educational Program who registered through August 2 to submit EEP form to Human Resource Services to confirm 2013 Fall Semester registration and tuition waiver
Augu	st 17	Saturday - End of College of Pharmacy 15-Week Summer Term

SUMMARY OF	TEACHING	DAYS,	2013	EIGHT-WEEK	SUMMER	SESSION
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	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Teaching	Days
June	3	3	3	4	4	4	June	21
July	5	5	5	3	4	4	July	26
August	-	-	-	1	-	-	August	1
Totals	8	8	8	8	8	8		48

February 1	Saturday - Deadline for submission of all application materials, College of Medicine, for the 2014 Fall Semester
February 1	Saturday - Deadline for submission of all application materials for the School of Interior Design
February 15	Saturday - Priority deadline for freshman applicants. Applicants for the 2014 Fall Semester by this date who meet selective admission criteria will be offered general admission; applicants after this date or deferred decision candidates will be considered on a space-available basis only
February 15	Saturday - Priority filing deadline for the 2014-2015 academic year for financial aid for entering freshmen
February 28	Friday - Last day for filing an application for an August 2014 undergraduate degree online in myUK.
March 1	Saturday - Deadline for all applicants to the College of Architecture
March 15	Saturday - Priority filing deadline for the 2014-2015 academic year for financial aid for continuing and transfer students
March 15	Saturday - Deadline for international applications to be submitted to The Graduate School for the 2014 Fall Semester
April 1	Tuesday- Deadline for NAAB Architecture transfer applicants
April 15	Tuesday - Deadline for applying with college deans for reinstatement after a second academic suspension for the 2014 Fall Semester
May 15	Thursday - Deadline for students to schedule an appointment for reinstatement in all colleges for the 2014 fall semester
May 15	Thursday - Deadline for undergraduate international applicants to submit 2014 Fall Semester application
June 15	Sunday- Earliest date to submit application for regular and Early Decision Program admission, College of Medicine, for the 2015 Fall Semester
June 16-	Monday-Friday -Summer Advising Conferences for new
July 11	freshmen,transfers, and readmitted students enrolling for the 2014 Fall Semester
June 21- September 20	Saturday-Saturday-Approved time period to apply online in myUK for a December 2014 degree from the Graduate School
June 29	Sunday - Last day for filing an application for a December 2014 undergraduate degree in college dean's office
June 30	Monday - Last day for filing an application for a December 2014 undergraduate degree online in myUK
July 18	Friday - Deadline for applying for admission to the Graduate School for the 2014 Fall Semester.
July 18-	Friday through Saturday - Add/Drop for registered
August 16	Students
August 1	Friday - Final deadline for submission of all required
August 1	documents to the Office of Admissions for undergraduate admission, excluding freshman for the 2014 Fall Semester, who will be considered on a space-available basis. Friday - Deadline for application for Early Decision
nagubt 1	Program, College of Medicine, for the 2015 Fall Semester

2014 Fall Semester

Aug. 6	Wednesday - Last day for students in the Employee Educational Program registered through Aug. 6 to submit EEP form to Human Resource Services to confirm 2014 registration and tuition waiver
August 19-25	Tuesday through Monday - Registration for new program
August 19-25	graduate students Tuesday through Monday - Fall registration for new undergraduate and new program graduate students who entered the University in either the 2014 Four-Week Intersession or Eight-Week Summer Session
August 21-25	Thursday through Monday - Fall registration for new post-baccalaureate students admitted for the Four- Week Intersession, Eight-Week Summer Session or Fall Semester
August 22	Friday - Payment deadline of registration fees and/or housing and dining fees-if total amount due is not paid as indicated on the account statement, a late payment fee of 1.25% of the amount past due will be assessed
August 22	Friday - Advising Conference and Registration for new international students who have been cleared for admission but did not priority register
August 22-30	Friday through Saturday - K week for all new undergraduate students
August 25	Monday - Advising Conference and Registration for new freshmen and transfer students who have been cleared for admission but did not priority register including registration for Evening and Weekend
August 25-26	Monday and Tuesday - Opening-of-term add/drop for registered students
August 25-29	Monday through Friday - Approved time period for students to change academic majors (note: please check with college for admission deadline)
August 26	Tuesday - Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
August 26	Tuesday - Advising Conference and Registration for readmission and non-degree students who have been cleared for admission but did not priority register including registration for Evening and Weekend
August 27 August 27- Sept. 3	Wednesday - First day of classes Wednesday through Wednesday - Late registration for returning students who did not priority register and new applicants cleared late for admission. A late fee is assessed students who register late
September 1 Sept. 3	Monday – Labor Day – Academic Holiday Wednesday – Last day to add a class for the 2014 Fall Semester
Sept. 3	Wednesday - Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund

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September 3	Wednesday - Last day for students in the Employee Educational Program who registered and/or changed schedules after Aug. 6 to submit EEP form to Human Resource Services to confirm 2014 Fall Semester registration and tuition waiver
September 17	Wednesday - Last day to drop a course without it appearing on the student's transcript
September 17	Wednesday - Last day to change grading option (pass/ fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit)
September 20	Saturday - Last day for doctoral candidates for a December degree to submit a Notification of Intent to schedule a final examination in The Graduate School
September 20	Saturday - Last day to apply for fall (December) 2014 degree(graduate school)
September 24	Wednesday - Last day to officially withdraw from the University or reduce course load and receive a 50 percent refund
September 25	Thursday - Deadline for submission of application and all required documents to the Office of Undergraduate Admission and University Registrar for change of residency status for 2014 Fall Semester
October 13- October 24	Monday through Friday - Midterm Grading window is open. The mid-term grading window will close at midnight on October 24.
October 15	Wednesday - Deadline for submission of application and all required documents to the Office of Admissions for undergraduate applicants planning to attend November Advising Conference (including registration for spring classes)
October 20 October 21-	Monday - Midterm of 2014 Fall Semester
Nov. 3	Tuesday through Monday - Approved time period for students to change academic majors (note: please check with college for admission deadline)
November 3	Monday - Deadline for completed AMCAS application, College of Medicine, for the 2015 Fall Semester
Nov. 3- November 25 November 7	Monday through Tuesday - Priority registration for the 2015 Spring Semester Friday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic
November 13	reasons." Thursday-Last day candidates for the December 2014 degree can schedule a final examination in the Graduate School
November 21	Friday - 2015 Spring Semester Advising Conference for new and readmitted undergraduate students
November 26-29	Wednesday through Saturday - Thanksgiving - Academic Holidays

#### 2014 Fall Semester

November	30	Sunday - Last day for filing an application for a May 2015 undergraduate degree online in myUK
December	1	Monday-Deadline for submission of application and receipt of all materials for admission, readmission or transfer to the College of Law for the 2015 Spring Semester
December	3-	Wednesday through Monday - Add/Drop for registered
December	22	students for the 2015 Spring Semester
December	4	Thursday- Last day candidates for a December 2014 degree can sit for a final examination
December	8	Monday - Deadline for applying for admission to the Graduate School for the 2015 Spring Semester.
December	8-	Monday through Monday - Final Grading window is open. The
December	22	final deadline for submission of grades online in the grading portal is midnight, Dec. 22
December	10	Wednesday - Last day for students in the Employee Program registered through December 10 to submit EEP form to Human Resource Services to confirm 2014 Spring Semester registration and tuition waiver
December	12	Friday - Last day of classes
December	15-19	Monday through Friday - Final Examinations
December	19	Friday - End of 2014 Fall Semester
December	19	Friday- Last day for candidates for a a Dec 2014 degree to submit a thesis/dissertation to the Graduate School
December	19	Friday - December Commencement

## SUMMARY OF TEACHING DAYS, FALL SEMESTER 2014

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Teaching Days	
August September	_ 4	- 5	_ 4	1 4	1 4	1 4	August September	3 25
October	4	4	5	5	5	4	October	27
November	4	4	3	3	3	4	November	21
December	2	2	2	2	2	1	December	11
Totals	14	15	14	15	15	14		87

February 15 2014 February 28 2014 March 15	Saturday - Priority filing deadline for the 2014-2015 academic year for financial aid for entering freshman Friday-Last day for filing an application for an August 2014 undergraduate degree online in myUK Saturday - Priority filing deadline for the 2014-2015
2014	academic year for financial aid for continuing and transfer students Friday - Deadline for international applications to
August 15 2014	be submitted to The Graduate School for the 2015 Spring Semester
September 15 2014	Monday - Deadline for applying with college deans for reinstatement after a second academic suspension for the 2015 Spring Semester
September 21- Feb. 20 October 1 2014	Sunday-Friday-Approved time period to apply myUK for a May 2015 degree from the Graduate School Wednesday - Deadline for students to schedule an appointment for reinstatement in all colleges for the 2015 spring semester
October 15 2014	Wednesday - Deadline for submission of application and all required documents to the Office of Admissions for undergraduate applicants planning to attend November Advising Conference (including registration for spring classes)
October 15	Wednesday - Deadline for undergraduate international
2014 November 21	applicants to submit 2015 Spring Semester application Friday - Advising Conference for freshmen, transfer,
2014	readmission students admitted for spring 2015
November 30	Sunday - Last day for filing an application for a
2014	May 2015 undergraduate degree online in myUK
December 1 2014	Monday - Final deadline for submission of application and all required documents to the Office of Admissions for undergraduate admission for the
- 1 - 2	2015 Spring Semester.
December 3- December 22 2014	Wednesday through Monday - Add/Drop for registered students for the 2015 Spring Semester
December 8 2014	Monday - Deadline for applying for admission to the Graduate School for the 2015 Spring Semester.
December 10 2014	Wednesday - Last day for students in the Employee Educational Program registered through December 10 to submit EEP form to Human Resource Services to confirm 2015 Spring Semester registration and tuition waiver
January 7-12	Wednesday through Monday - Registration for new program graduate students
January 8-12	Thursday through Monday - Registration for new post- baccalaureate students
January 9	Friday - International Student Advising Conference

January 12	Monday - Advising Conference and Registration for new freshman and transfer students who have been cleared for admission but did not priority register including registration for Evening and Weekend
January 12-13	Monday and Tuesday - Opening-of-term add/drop for registered students
January 13	Tuesday - Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
January 13	Tuesday - Advising Conference and Registration for readmission and non-degree students including registration for Evening and Weekend
January 14	Wednesday - First day of classes
January 14-21	Wednesday through Wednesday - Late registration for returning students who did not priority register and new applicants cleared late for admission. A late fee is assessed students who register late.
January 19	Monday - Martin Luther King Birthday - Academic Holiday
January 21	Wednesday - Last day to add a class for the 2015 Spring Semester
January 21	Wednesday - Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund
January 21	Wednesday - Last day for students in the Employee Educational Program who registered and/or changed schedules after December 10 to submit EEP form to Human Resource Services to confirm 2015 Spring Semester registration and
January 22	tuition waiver Thursday - Payment deadline of registration fees and/or housing and dining fees-if total amount due is not paid as indicated on the account statement, a late payment fee of 1.25% of the amount past due will be assessed
February 1	Sunday - Deadline for international applications to be submitted to The Graduate School for the 2015 Fall
February 1	Semester Sunday - Preferred deadline for submitting application for admission to the College of Dentistry for the 2015 Fall Semester
February 4	Wednesday - Last day to drop a course without it appearing on the student's transcript
February 4	Wednesday - Last day to change grading option (pass/ fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit)
February 11	Wednesday - Last day to officially withdraw from the University or reduce course load and receive a 50 percent refund
February 12	Thursday - Deadline for submission of application and all required documents to the Office of Undergraduate Admission and University Registrar for change of residency status for 2015 Spring Semester

February 20	Friday - Last day for doctoral candidates for a May degree to submit a Notification of Intent to schedule a final examination in The Graduate School
February 20	Friday - Last day to apply for May 2015 degree (graduate school) online in myUK
February 28	Saturday - Last day for filing an application for an August 2015 undergraduate degree online in myUK
March 1	Sunday - Last day for submission of application for admission to the College of Law for the 2015 Fall Semester
March 2-	Monday through Friday - Midterm Grading window is open. The
March 13	mid-term grading window will close at midnight on March 13.
March 2-	Monday-Wednesday - Students are prohibited from
April 22	changing academic major
March 9	Monday - Midterm of 2015 Spring Semester
March 16-21	Monday through Saturday - Spring Vacation - Academic Holidays
March 30-	Monday through Tuesday - Priority registration for the
April 21	2015 Fall Semester and both 2015 Summer Sessions
April 9	Thursday - Last day for candidates for a May 2015 degree to
-	schedule a final examination in the Graduate School
April 10	Friday - Last day to withdraw from the University or
	reduce course load. Students cam withdraw or reduce
	course load after this date only for "urgent non-
April 10	academic reasons." Friday - Deadline for applying for admission to the Graduate
ADIII IU	School for the 2015 Four-Week Summer Session.
April 23	Thursday - Last day for candidates for a May 2015 degree to
	sit for a final examination
April 27 -	Monday through Monday - Final Grading window is open. The
May 11	final deadline for submission of grades online in the grading portal is midnight, May 11
April 28-	Tuesday through Monday - Four-Week Intersession
May 4	registration and add/drop continue for students
Press 1 20	enrolled in the 2015 Spring Semester
April 28- June 3	Tuesday through Wednesday - Eight-Week Summer Session registration and add/drop continue for students
Julie 5	enrolled in the 2015 Spring Semester
May 1	Friday - Last day of classes
May 4-May 8	Monday through Friday - Final Examinations
May 5-	Tuesday through Saturday - Add/Drop for priority
June 20	registered students for the 2015 Fall Semester
May 8	Friday - End of 2015 Spring Semester
May 8	Friday – Last day for candidates for a May 2015 degree to submit a thesis/dissertation to The Graduate School
May 9	Saburday - Commencement
May 11-	Monday-Friday-College of Pharmacy 15-Week Summer Term
August 22	

SUMMARY OF TEACHING DAYS, SPRING SEMESTER 2015

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Teaching	Days
January February March April May Totals	1 4 4 - 13	2 4 4 - 14	3 4 3 5 - 15	3 4 3 5 - 15	3 4 3 4 1 15	3 4 3 4 - 14	January February March April May	15 24 20 26 1 86

2015 Four-Week - First Summer Session

Feb. 21- June 20	Sat-Sat-Approved time period to apply online in myUK for an August 2015 degree from the Graduate School
February 28	application Saturday - Last day for filing an application for an August 2015 undergraduate degree online in myUK
March 15	Sunday - Priority filing deadline for financial aid for the 4 week and/or the 8 week summer term(s)
April 10	Friday - Deadline for applying for admission to the Graduate School for the 2015 Four-Week Summer Session.
April 15	Wednesday - Deadline for submission of application and all required documents to the Office of Admissions for undergraduate admission for the 2015 Four-Week Intersession
April 28-	Tuesday through Monday - Four-Week Intersession
May 4	registration and add/drop continue for students
Mars 11	enrolled in the 2015 Spring Semester
May 11	Monday - Beginning of College of Pharmacy 15-week Summer Term
May 11	Monday - Advising Conference and Registration for new
may II	and returning students
May 11	Monday - Deadline for applying for admission to the Graduate School for the 2015 Eight Week Summer Session.
May 12	Tuesday – First day of classes
May 12	Tuesday - Last day a student may officially drop a
	course or cancel registration with the University Registrar for a full refund of fees
May 12-13	Tuesday through Wednesday - Late registration for
	returning students not already registered and new
	applicants cleared late for admission. A late
More 12	fee is assessed students who register late
May 13	Wednesday - Last day to add a class for the 2015 Four-Week Intersession
May 13	Wednesday - Last day to officially withdraw from the
	University or reduce course load and receive an 80
	percent refund
May 13	Wednesday - Last day for students in the Employee
	Educational Program to submit EEP form to Human
	Resource Services for tuition waiver for the 2015
	Four-Week Intersession
May 18	Monday - Last day to drop a course without it
	appearing on the student's transcript

2015 Four-Week - First Summer Session

May 18	Monday - Last day to change grading option (pass/fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit)
May 19	Tuesday - Last day to officially withdraw from the University or reduce course load and receive a 50 percent refund
May 20-	Wednesday through Wednesday - Eight-Week registration
June 10	and add/drop for students who entered the University in the 2015 Four-Week Intersession
May 22	Friday - Payment deadline of registration fees and/or housing and dining fees-if total amount due is not paid as indicated on the account statement, a late payment fee of 1.25% of the amount past due will be assessed
May 25	Monday - Memorial Day - Academic Holiday
May 26	Tuesday - Midterm of 2015 Four-Week Intersession
May 27	Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons."
June 1 -	Monday through Friday - Final Grading window is open. The
June 12	final deadline for submission of grades online in the grading portal is midnight, June 12
June 3	Wednesday - Last day for doctoral candidates for an August degree to submit a Notification of Intent to schedule a final examination in The Graduate School
June 9	Tuesday - Final Examinations
June 9	Tuesday - End of 2015 Four-Week Intersession
June 10	Wednesday - Deadline for submission of application and all required documents to the Office of Undergraduate Admission and University Registrar for change of residency status for the Four-Week and the Eight-Week Summer Sessions

SUMMARY OF TEACHING DAYS, 2014 FOUR-WEEK INTERSESSION

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Teachin	g Days
May	1	3	3	3	3	3	May	16
June	2	2	1	1	1	1	June	8
Totals	3	5	4	4	4	4		24

2015 Eight-Week - Second Summer Session

February 28	Saturday - Last day for filing an application for an August 2015 undergraduate degree online in myUK
March 15	Sunday - Priority filing deadline for financial aid for the 4 week and/or the 8 week summer term(s)
April 10	Friday - Deadline for applying for admission to The Graduate School for the 2015 Four Week Summer Intersession.
April 28-	Tuesday through Wednesday - Eight-Week Summer Session
June 3	registration and add/drop continue for students enrolled in the 2015 Spring Semester
May 11	Monday - Deadline for applying for admission to the Graduate School for the 2015 Eight Week Summer Session.
May 15	Friday - Deadline for submission of application and all required documents to the Office of Admissions for undergraduate admission for the 2015 Eight-Week Summer Session.
May 20-	Wednesday through Wednesday - Eight-Week registration
June 10	and add/drop for students who entered the University in the 2015 Four-Week Intersession
June 10	Wednesday - Deadline for submission of application and all required documents to the Office of Undergraduate Admission and University Registrar for change of residency status for the Eight-Week Summer Session
June 10	Wednesday - Advising Conference and Registration for new and returning students including registration for Evening and Weekend
June 11	Thursday - First day of classes
June 11	Thursday - Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
June 11-12	Thursday through Friday - Late registration for returning students not already registered and new applicants cleared late for admission. A late fee is assessed students who register late.

2015 Eight-Week - Second Summer Session

June 12	Friday - Last day to enter an organized class for the
	2015 Eight-Week Summer Session
June 12	Friday - Last day to officially withdraw from the
	University or reduce course load and receive an 80
	percent refund
June 12	Friday - Last day for students in the Employee
	Educational Program to submit EEP form to Human
	Resource Services for tuition waiver for the 2015
	Eight-Week Summer Session
June 15	Monday - Deadline for international applications to
	be submitted to The Graduate School for the
	Spring Semester
June 20	Saturday Last day to submit application for degree to
Suite 20	receive an August degree (graduate school)
June 20	Saturday - Last day for notification and last day to apply
oune zo	for for August 2015 degree
June 22	Monday - Payment deadline of registration fees and/or
Julie 22	
	housing and dining fees-if total amount due is not paid as
	indicated on the account statement, a late payment fee of
	1.25% of the amount past due will be assessed
June 22	Monday - Last day to change grading option (pass/fail
	to letter grade or letter grade to pass/fail; audit
	to credit or credit to audit)
June 22	Monday - Last day to drop a course without it
	appearing on the student's transcript
June 23-	Tuesday-Saturday-Summer Advising Conferences for new
July 18	freshmen,(transfer) students, auditors, non-degree and
	readmitted students enrolling for the 2015 Fall
	Semester
June 25	Thursday - Last day to officially withdraw from the
	University or reduce course load and receive a 50
	percent refund
June 25	Thursday - Last day to officially withdraw from the
	University or reduce course load and receive a 50
	percent refund
June 30	Tuesday-Last day for filing an application for a December
	2015 undergraduate degree online in myUK
July 3	Friday - Independence Day - Academic Holiday
July 9	Thursday - Midterm of 2015 Eight-Week Summer Session
July 9	
	Thursday, last day for candidates for an August degree to
0 4 = 7 5	Thursday - Last day for candidates for an August degree to
-	schedule a final examination in the graduate school
July 15	schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University
-	schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or
-	schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent
July 15	schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons."
-	schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons." Thursday - Last day for candidates for an August degree to
July 15 July 23	schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons." Thursday - Last day for candidates for an August degree to sit for the final examination in the graduate school
July 15	<pre>schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons." Thursday - Last day for candidates for an August degree to sit for the final examination in the graduate school Friday - Deadline for applying for admission to the Graduate</pre>
July 15 July 23 July 24	<pre>schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons." Thursday - Last day for candidates for an August degree to sit for the final examination in the graduate school Friday - Deadline for applying for admission to the Graduate School for the 2015 Fall Semester.</pre>
July 15 July 23 July 24 July 27 -	<pre>schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons." Thursday - Last day for candidates for an August degree to sit for the final examination in the graduate school Friday - Deadline for applying for admission to the Graduate School for the 2015 Fall Semester. Monday through Monday - Final Grading window is open. The</pre>
July 15 July 23 July 24	<pre>schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons." Thursday - Last day for candidates for an August degree to sit for the final examination in the graduate school Friday - Deadline for applying for admission to the Graduate School for the 2015 Fall Semester. Monday through Monday - Final Grading window is open. The final deadline for submission of grades online in the</pre>
July 15 July 23 July 24 July 27 - August 10	<pre>schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons." Thursday - Last day for candidates for an August degree to sit for the final examination in the graduate school Friday - Deadline for applying for admission to the Graduate School for the 2015 Fall Semester. Monday through Monday - Final Grading window is open. The final deadline for submission of grades online in the grading portal is midnight, August 10</pre>
July 15 July 23 July 24 July 27 -	<pre>schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons." Thursday - Last day for candidates for an August degree to sit for the final examination in the graduate school Friday - Deadline for applying for admission to the Graduate School for the 2015 Fall Semester. Monday through Monday - Final Grading window is open. The final deadline for submission of grades online in the grading portal is midnight, August 10 Wednesday - Last day for students in the Employee</pre>
July 15 July 23 July 24 July 27 - August 10	<pre>schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons." Thursday - Last day for candidates for an August degree to sit for the final examination in the graduate school Friday - Deadline for applying for admission to the Graduate School for the 2015 Fall Semester. Monday through Monday - Final Grading window is open. The final deadline for submission of grades online in the grading portal is midnight, August 10</pre>
July 15 July 23 July 24 July 27 - August 10	<pre>schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons." Thursday - Last day for candidates for an August degree to sit for the final examination in the graduate school Friday - Deadline for applying for admission to the Graduate School for the 2015 Fall Semester. Monday through Monday - Final Grading window is open. The final deadline for submission of grades online in the grading portal is midnight, August 10 Wednesday - Last day for students in the Employee</pre>
July 15 July 23 July 24 July 27 - August 10	<pre>schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons." Thursday - Last day for candidates for an August degree to sit for the final examination in the graduate school Friday - Deadline for applying for admission to the Graduate School for the 2015 Fall Semester. Monday through Monday - Final Grading window is open. The final deadline for submission of grades online in the grading portal is midnight, August 10 Wednesday - Last day for students in the Employee Educational Program registered through August 5 to</pre>
July 15 July 23 July 24 July 27 - August 10	<pre>schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons." Thursday - Last day for candidates for an August degree to sit for the final examination in the graduate school Friday - Deadline for applying for admission to the Graduate School for the 2015 Fall Semester. Monday through Monday - Final Grading window is open. The final deadline for submission of grades online in the grading portal is midnight, August 10 Wednesday - Last day for students in the Employee Educational Program registered through August 5 to submit EEP form to Human Resource Services to confirm</pre>
July 15 July 23 July 24 July 27 - August 10 August 5	<pre>schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons." Thursday - Last day for candidates for an August degree to sit for the final examination in the graduate school Friday - Deadline for applying for admission to the Graduate School for the 2015 Fall Semester. Monday through Monday - Final Grading window is open. The final deadline for submission of grades online in the grading portal is midnight, August 10 Wednesday - Last day for students in the Employee Educational Program registered through August 5 to submit EEP form to Human Resource Services to confirm 2015 Fall Semester registration and tuition waiver Thursday - Last day for candidates for an August degree to</pre>
July 15 July 23 July 24 July 27 - August 10 August 5	<pre>schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons." Thursday - Last day for candidates for an August degree to sit for the final examination in the graduate school Friday - Deadline for applying for admission to the Graduate School for the 2015 Fall Semester. Monday through Monday - Final Grading window is open. The final deadline for submission of grades online in the grading portal is midnight, August 10 Wednesday - Last day for students in the Employee Educational Program registered through August 5 to submit EEP form to Human Resource Services to confirm 2015 Fall Semester registration and tuition waiver Thursday - Last day for candidates for an August degree to submit thesis/dissertation to the graduate school</pre>
July 15 July 23 July 24 July 27 - August 10 August 5 August 6	<pre>schedule a final examination in the graduate school Wednesday - Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons." Thursday - Last day for candidates for an August degree to sit for the final examination in the graduate school Friday - Deadline for applying for admission to the Graduate School for the 2015 Fall Semester. Monday through Monday - Final Grading window is open. The final deadline for submission of grades online in the grading portal is midnight, August 10 Wednesday - Last day for students in the Employee Educational Program registered through August 5 to submit EEP form to Human Resource Services to confirm 2015 Fall Semester registration and tuition waiver Thursday - Last day for candidates for an August degree to</pre>

#### 2015 Eight-Week - Second Summer Session

August 22

Saturday - End of College of Pharmacy 15-week Summer Term

## SUMMARY OF TEACHING DAYS, 2014 EIGHT-WEEK SUMMER SESSION

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Teaching	Days
June July August Totals	3 4 1 8	3 4 1 8	2 5 1 8	3 5 1 9	3 4 - 7	3 4 1 8	June July August	17 26 5 48

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## COLLEGE OF DENTISTRY TENTATIVE ACADEMIC CALENDAR 2012-2013 FOR DMD, OROFACIAL PAIN, ORTHODONTICS, PEDIATRIC DENTISTRY, AND PERIODONTICS PROGRAMS

## Fall 2012

June 11 Monday	Academic Year Begins for 4 <sup>th</sup> Year DMD Students (Externships)
July 1 Sunday	Pediatric Dentistry Residency begins for new 1 <sup>st</sup> Years and 1 <sup>st</sup> Years promoted to 2 <sup>nd</sup> Year
July 2 Monday	Academic Year Begins for 1 <sup>st</sup> Year Periodontics Students
July 4 Wednesday	Independence Day: Academic Holiday
July 9 Monday	Academic Year Begins for Orofacial Pain Students
July 23 Monday	Academic Year Begins for 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Periodontics Students
August 6 Monday	Academic Year Begins for 1 <sup>st</sup> , 2 <sup>nd</sup> , and 3 <sup>rd</sup> Year DMD Students
August 6 Monday	Clinical Year Begins for 4 <sup>th</sup> Year DMD Students
August 6 Monday	Academic Year Begins for 1 <sup>st</sup> Year Orthodontics Students, 1 <sup>st</sup> Years Promoted to 2 <sup>nd</sup> Year, 2 <sup>nd</sup> Years Promoted to 3 <sup>rd</sup> Year
August 6 Monday	Last day a 1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> and 4 <sup>th</sup> Year DMD Student can officially withdraw from the College of Dentistry for a full refund for the current term
August 13 Monday	Last day a 1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> , and 4thYear DMD student can officially withdraw from the College of Dentistry and receive an 80 percent refund for the current term
August 27 Monday	Last day a 1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> , and 4thYear DMD student can officially withdraw from the College of Dentistry and receive a 50 percent refund for the current term
September 3 Monday	Labor Day: Academic Holiday
November 22, 23 Thursday & Friday	Thanksgiving Holidays: Academic Holidays
December 14 Friday	Winter Break Begins After Last Class or Clinic for DMD, Orthodontics, and Periodontics Students

December 21 Friday	Winter Break begins for Orofacial Pain Students
<u>Spring 2013</u>	
January 2 Wednesday	Classes/Clinics Resume for All Students/Residents: DMD, Orofacial Pain, Orthodontics, Pediatric Dentistry and Periodontics
January 2 Wednesday	Last day a DMD student can officially withdraw from the College of Dentistry and receive full refund for the current term
January 9 Wednesday	Last day a DMD student can officially withdraw from the College of Dentistry and receive an 80 percent refund for the current term
January 21 Monday	Martin Luther King, Jr. Birthday Observed: Academic Holiday
January 31 Thursday	Last day a DMD student can officially withdraw from the College of Dentistry and receive a 50 percent refund for the current term
April 1 – 5	Spring Break for DMD, Orthodontics, and Periodontics Students
April 24 – 26	Spring Break for Orofacial Pain Students (National Conference)
May 3 Friday	Academic Year Ends for Graduating DMD Students
May 5 Sunday	University Commencement College of Dentistry Hooding Ceremony
May 27 Monday	Memorial Day: Academic Holiday
May 31 Friday	Academic Year Ends for 3 <sup>rd</sup> Year Graduating Orthodontics Students
June 7 Friday	Academic Year Ends for 3 <sup>rd</sup> Year DMD Students
June 14 Friday	Academic Year Ends for 1 <sup>st</sup> and 2 <sup>nd</sup> Year DMD Students
June 24 – July 5	Break for 1 <sup>st</sup> and 2 <sup>nd</sup> Year Orthodontics Students
June 28 Friday	Academic Year Ends for 1 <sup>st</sup> Year DMD, Orofacial Pain, and 1 <sup>st</sup> , 2 <sup>nd</sup> , and 3 <sup>rd</sup> Year Periodontics Students
June 30 Sunday	Last Day of Residency for 2 <sup>nd</sup> Year Pediatric Dentistry Residents
July 1 – July 19	Summer Break for 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Periodontics Students

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## COLLEGE OF DENTISTRY TENTATIVE ACADEMIC CALENDAR 2014-2015 FOR DMD, OROFACIAL PAIN, ORTHODONTICS, PEDIATRIC DENTISTRY, AND PERIODONTICS PROGRAMS

## Fall 2014

June 16 Monday	Academic Year Begins for 4 <sup>th</sup> Year DMD Students (Externships)
July 1 Tuesday	Academic Year Begins for 1 <sup>st</sup> Year Periodontics Students
July 1 Tuesday	Pediatric Dentistry Residency begins for new $1^{st}$ Years and $1^{st}$ Years promoted to $2^{nd}$ Year
July 4 Friday	Independence Day: Academic Holiday
July 7 Monday	Academic Year Begins for Orofacial Pain Students
July 21 Monday	Academic Year Begins for 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Periodontics Students
August 4 Monday	Academic Year Begins for 1 <sup>st</sup> , 2 <sup>nd</sup> , and 3 <sup>rd</sup> Year DMD Students
August 4 Monday	Clinical Year Begins for 4 <sup>th</sup> Year DMD Students
August 4 Monday	Academic Year Begins for 1 <sup>st</sup> Year Orthodontics Students, 1 <sup>st</sup> Years Promoted to 2 <sup>nd</sup> Year, 2 <sup>nd</sup> Years Promoted to 3 <sup>rd</sup> Year
August 4 Monday	Last day a 1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> , and 4 <sup>th</sup> Year DMD student can officially withdraw from the College of Dentistry for a full refund for the current term
August 11 Monday	Last day a 1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> , and 4 <sup>th</sup> Year DMD student can officially withdraw from the College of Dentistry and receive an 80 percent refund for the current term
September 1 Monday	Labor Day: Academic Holiday
September 2 Tuesday	Last day a 1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> , and 4 <sup>th</sup> Year DMD student can officially withdraw from the College of Dentistry and receive a 50 percent refund for the current term
November 27, 28 Thursday & Friday	Thanksgiving Holidays: Academic Holidays
December 19 Friday	Winter Break Begins After Last Class or Clinic for DMD, Orofacial Pain, Orthodontics, and Periodontics Students

# <u>Spring 2015</u>

January 5 Monday	Classes/Clinics Resume for All Students/Residents: DMD, Orofacial Pain, Orthodontics, Pediatric Dentistry, and Periodontics
January 19, Monday	Martin Luther King, Jr. Birthday Observed: Academic Holiday
March 30 – April 3	Spring Break for DMD, Orthodontics, and Periodontics Students
TBD	Spring Break for Orofacial Pain Students (National Conference)
May 8 Friday	Academic Year Ends for Graduating DMD Students
May 9 Saturday	University Commencement College of Dentistry Hooding Ceremony
May 25 Monday	Memorial Day: Academic Holiday
May 29 Friday	Academic Year Ends for 3 <sup>rd</sup> Year Graduating Orthodontics Students
June 12 Friday	Academic Year Ends for 3 <sup>rd</sup> Year DMD Students
June 19 Friday	Academic Year Ends for 2 <sup>nd</sup> Year DMD Students
June 22 – July 3	Break for 1 <sup>st</sup> and 2 <sup>nd</sup> Year Orthodontics Students
June 26 Friday	Academic Year Ends for 1 <sup>st</sup> Year DMD, Orofacial Pain, 1 <sup>st</sup> , 2 <sup>nd</sup> , and 3 <sup>rd</sup> Year Periodontics Students
June 29 – July 10	Break for 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Periodontics Students
June 30 Saturday	Last Day of Residency for 2 <sup>nd</sup> Year Pediatric Dentistry Residents

### UNIVERSITY OF KENTUCKY COLLEGE OF LAW CALENDAR FALL 2012

#### <u>August 20 - Monday- Class work begins</u>

- August 20 Monday Add/Drop
- August 20 Monday Last day a student may officially drop a course or cancel registration with the university Registrar for a full refund of fees.
- August 21 Tuesday Add/Drop
- August 22 Wednesday Payment deadline of registration fee and /or housing and dining fees if total amount due is not paid as indicted on the account past due will be assessed
- August 28 Tuesday Last day to add a class for the 2012 fall semester
- August 28 Tuesday Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund
- September 3 Monday Labor Day Academic Holiday
- September 12 Wednesday Last day to change grading option (credit to audit or audit to credit)
- September 12 Wednesday Last day to drop a course without it appearing on student's transcript
- September 19 Wednesday Last day to officially withdraw from the University or reduce course schedule and receive a 50% refund
- September 20 Thursday Last day to file an application for a December degree
- September 20 Thursday Deadline to apply for Kentucky residency for this semester
- October 9 Tuesday Last day to withdraw from a course Students may withdraw after this date only upon petition to the Dean's office specifying "reasons relating to extended illness or equivalent distress."
- November 6 Tuesday Presidential Election-Academic Holiday
- October 29 November 20 Monday through Tuesday Priority Registration for the 2013 Spring Semester
- November 21-25 Wednesday through Saturday Thanksgiving Holidays Academic Holidays
- November 30 Friday End of class work
- December 1-3 Saturday through Monday Law Examination Reading Period
- December 4-15 Tuesday through Saturday Law Final Examination Period
- December 15- Saturday End of 2012 Fall Semester

### UNIVERSITY OF KENTUCKY COLLEGE OF LAW CALENDAR 2013 SPRING SEMESTER

- January 7 Monday Add/Drop
- January 7 Monday Class work begins
- January 8 Tuesday Add/Drop
- January 8 Tuesday Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
- January 15 Tuesday Last day to add a class for the 2013 Spring Semester
- January 15 Tuesday Last day to officially withdraw from the University or reduce course load and receive an 80% refund.
- January. 21 Monday Martin Luther King Birthday Academic Holiday
- January 22 Tuesday Payment deadline of registration fees and/or housing and dining fees if total amount due is not paid as indicated on the account statement, a late payment fee of 1.25 percent of the amount past due will be assessed
- January 30 Wednesday Last day to drop a course without it appearing on your transcript
- January 30 Wednesday Last day to change grading option (credit to audit or audit to credit)
- February 6 Wednesday Last day to officially withdraw from the University or reduce course schedule and receive a 50 percent refund
- February 7 Thursday Last day to file an application for a May degree
- <u>February 22 Friday Last day to withdraw from a course</u> Students may withdraw after this date only upon petition to the Dean's office specifying "reasons relating to extended illness or equivalent distress."
- March 1 Friday Last day for submission of application for admission for 2013 Fall Semester
- March 11-16 Monday through Saturday Spring Vacation Academic Holidays
- <u>March 25-April 16 Monday through Tuesday Priority Registration for the 2013 Summer Session and 2013</u>
   <u>Fall Semester</u>
- April 19 Friday End of class work
- April 20-22 Saturday through Monday Law Examination Reading Period
- April 23-May 4 Tuesday through Saturday Law Final Examination Period
- May 3 Friday Law Commencement
- May 4 Saturday End of 2013 Spring Semester

# 2013 Four-Week - First Summer Session

## April -May

- April 30-May 6 Tuesday through Monday add/drop continue for students enrolled in the 2013 Spring Semester
- May 7 Tuesday First day of classes
- May 7 Tuesday Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
- May 7-8 Tuesday through Wednesday Late registration for returning students not already registered and new applicants cleared late for admission. A late fee is assessed students who register late.
- May 8 Wednesday Last day to add a class for the 2013 Four-Week Intersession
- May 8 Wednesday Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund
- May 13 Monday Last day to drop a course without it appearing on the student's transcript
- May 13 Monday Last day to change grading option (pass/fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit)
- May 14 Tuesday Last day to officially withdraw from the University or reduce course load and receive a 50 percent refund
- May 20 Monday Midterm of 2013 Four-Week Intersession –Last Day to withdraw from a course—Students may withdraw after this date only upon petition to the Dean's office specifying "reasons relating to extended illness or equivalent distress."
- May 22 Wednesday Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons."
- May 22 Wednesday Payment Deadline
- May 27 Monday Memorial Day Academic Holiday

## May-June

- May 31 Friday End of class work
- June 1-2 Saturday Sunday Law Examination Reading Period -June 3-4 Monday – Tuesday Law Final Examination Period–

June 4 Tuesday End of Four Week Intersession

### UNIVERSITY OF KENTUCKY COLLEGE OF LAW CALENDAR 2013 SUMMER TERM

#### • June 6 - Thursday - Class work begins

- June 6 Thursday Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
- June 7 Friday Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund
- June 7 Friday Last day to enter an organized class for the 2013 eight week summer session
- June 17 Monday Last day to change grading option (credit to audit or audit to credit)
- June 17 Monday Last day to drop a course without it appearing on student's transcript
- June 20 Thursday Last day to officially withdraw from the University or reduce course schedule and receive a 50 percent refund
- June 21 Friday Last day to file an application for an August degree
- June 22 Payment Deadline
- July 1 Monday Last day to withdraw from a course Students may withdraw after this date only upon petition to the Dean's office specifying "reasons relating to extended illness or equivalent distress."
- July 4 Thursday Independence Day Academic Holiday
- July 26 Friday End of class work
- July 27 28 Saturday & Sunday Law Examination Reading Period
- July 29-Aug 1 Monday through Thursday Law Final Examination Period
- <u>August 1 Thursday End of 2013 Summer Session</u>

### UNIVERSITY OF KENTUCKY COLLEGE OF LAW CALENDAR FALL 2014

- August 22 Friday Payment deadline of registration fees and /or housing and dining fees if total amount due is not paid as indicted on the account statement, a late payment fee of 1.25% of the amount past due will be assessed.
- <u>August 26 Tuesday- Class work begins</u>
- August 26– Tuesday Add/Drop
- August 26 Tuesday Last day a student may officially drop a course or cancel registration with the university Registrar for a full refund of fees.
- August 27 Wednesday Add/Drop
- September 1 Monday Labor Day Academic Holiday
- September 2 Tuesday Monday Classes Meet
- Sept. 3 Wednesday Last day to add a class for the 2014 fall semester
- Sept. 3 Wednesday Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund
- September 17 Wednesday Last day to change grading option (credit to audit or audit to credit)
- September 17 Wednesday Last day to drop a course without it appearing on student's transcript
- September 254- Wednesday Last day to officially withdraw from the University or reduce course schedule and receive a 50% refund
- September 24 Wednesday Last day to file an application for a December degree
- September 25 Thursday Deadline to apply for Kentucky residency for this semester
- October 21 Tuesday Last day to withdraw from a course Students may withdraw after this date only upon petition to the Dean's office specifying "reasons relating to extended illness or equivalent distress."
- November 3 November 25 Monday through Tuesday Priority Registration for the 2015 Spring Semester
- November 26-29 Wednesday through Saturday Thanksgiving Holidays Academic Holidays
- December 5 Friday End of class work
- December 6-8 Saturday through Monday Law Examination Reading Period
- December 9-20 Tuesday through Saturday Law Final Examination Period
- December 20- Saturday End of 2014 Fall Semester

### UNIVERSITY OF KENTUCKY COLLEGE OF LAW CALENDAR 2015 SPRING SEMESTER

- January 12 Monday Add/Drop
- January 12 Monday Class work begins
- January 13 Tuesday Add/Drop
- January 13 Tuesday Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
- January. 19 Monday Martin Luther King Birthday Academic Holiday
- January 21- Wednesday Last day to add a class for the 2014 Spring Semester
- January 21 Wednesday Last day to officially withdraw from the University or reduce course load and receive an 80% refund.
- January 22 -Thursday Payment deadline of registration fees and/or housing and dining fees if total amount due is not paid as indicated on the account statement, a late payment fee of 1.25 percent of the amount past due will be assessed
- Feb. 4 Wednesday Last day to drop a course without it appearing on your transcript
- Feb. 4 Wednesday Last day to change grading option (credit to audit or audit to credit)
- February 11 Wednesday Last day to officially withdraw from the University or reduce course schedule and receive a 50 percent refund
- February 12 Thursday Last day to file an application for a May degree
- <u>February 27 Friday Last day to withdraw from a course</u> Students may withdraw after this date only upon petition to the Dean's office specifying "reasons relating to extended illness or equivalent distress."
- March 1 Sunday Last day for submission of application for admission for 2013 Fall Semester
- March 16-21 Monday through Saturday Spring Vacation Academic Holidays
- March 30-April 21 Monday through Tuesday Priority Registration for the 2015 Summer Session and 2015
   Fall Semester
- April 24 Friday End of class work
- April 25-26 Saturday through Monday Law Examination Reading Period
- April 28-May 9 Tuesday through Saturday Law Final Examination Period
- May 8 Friday Law Commencement
- May 9 Saturday End of 2015 Spring Semester

# 2015 Four-Week - First Summer Session

## -May

- May 5 -May 11 Tuesday through Monday add/drop continue for students enrolled in the 2015 Spring Semester
- May 12 Tuesday First day of classes
- May 12 Tuesday Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
- May 12-13 Tuesday through Wednesday Late registration for returning students not already registered and new applicants cleared late for admission. A late fee is assessed students who register late.
- May 13 Wednesday Last day to add a class for the 2015 Four-Week Intersession
- May 13 Wednesday Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund
- May 18 Monday Last day to drop a course without it appearing on the student's transcript
- May 18 Monday Last day to change grading option (pass/fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit)
- May 19 Tuesday Last day to officially withdraw from the University or reduce course load and receive a 50 percent refund
- May 22—Friday Payment deadline
- May 25 Monday Midterm of 2015 Four-Week Intersession Last day to withdraw from a course – Students may withdraw after this date only upon petition to the Dean's office specifying "reasons relating to extended illness or equivalent distress."
- Monday 25 Monday Memorial Day Academic Holiday
- May 27- Wednesday Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for "urgent non-academic reasons."

## June

- June 5 Friday End of class work
- June 6-7 Saturday Sunday Law Examination Reading Period -June 8-9 Monday – Tuesday Law Final Examination Period–

June 9 Tuesday End of Four Week Intersession

### UNIVERSITY OF KENTUCKY COLLEGE OF LAW CALENDAR 2015 SUMMER TERM

#### • June 11 - Thursday - Class work begins

- June 11 Thursday Last day a student may officially drop a course or cancel registration with the University Registrar for a full refund of fees
- June 12 Friday Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund
- June 12 Friday Last day to enter an organized class for the 2015 eight week summer session
- June 22 Monday Last day to change grading option (credit to audit or audit to credit)
- June 22 Monday Last day to drop a course without it appearing on student's transcript
- June 25 Thursday Last day to officially withdraw from the University or reduce course schedule and receive a 50 percent refund
- June 26- Friday Last day to file an application for an August degree
- June 22 Payment Deadline

#### July 4 Saturday Independence Day

- July 6 Monday Independence Day Academic Holiday Observed
- July 7- Tuesday Last day to withdraw from a course Students may withdraw after this date only upon petition to the Dean's office specifying "reasons relating to extended illness or equivalent distress."
- July 31 Friday End of class work
- August 1 and 2 Saturday & Sunday Law Examination Reading Period
- -Aug 3-6 Monday through Thursday Law Final Examination Period
- <u>August 6 Thursday End of 2015 Summer Session</u>

## 46 UNIVERSITY OF KENTUCKY COLLEGE OF MEDICINE 2012-2013 Academic Year

2012 Fall Semester				
July 26 & 27	Thursday & Friday – Third-year general orientation			
July 30 July 30	Monday – Fourth-year rotations begin Monday – Last day for fourth-year students to withdraw from the College of Medicine for a full refund of tuition & fees			
July 30 July 30	Monday – First-year orientation begins Monday – Last day for first-year students to withdraw from the College of Medicine for a full refund of tuition & fees			
July 30 July 30	Monday – Third-year students begin rotations Monday – Last day for third-year students to withdraw from the Colleg of Medicine for a full refund of tuition & fees			
August 6	Monday – Last day for first, third, and fourth-year students to withdraw from the College of Medicine and receive an 80% refund			
August 6 August 6	First-year and second-year students begin classes Monday – Last day for second-year students to withdraw from the College of Medicine for a full refund of tuition & fees			
August 13	Monday – Last day for second-year students to withdraw from the College of Medicine and receive an 80% refund			
August 22	Monday – Tuition deadline for all students			
September 3	Monday – First and second-year students – LABOR DAY HOLIDAY			
September 19	Wednesday – Last day to withdraw from the College of Medicine and receive a 50% refund			
November 1	Last day for candidates applying to the College of Medicine to submit their application to AMCAS			
November 6	Tuesday – Presidential Election Day Holiday			
November 21-25	Wednesday-Sunday – First and second-year students – THANKSGIVING HOLIDAY			
December 15	Saturday – WINTER BREAK begins			

### 47 UNIVERSITY OF KENTUCKY COLLEGE OF MEDICINE 2012-2013 Academic Year

## 2013 Spring Semester

January 2 January 2	Wednesday – All students register and return to class Wednesday – Last day to withdraw from the College of Medicine and receive a full refund	
January 9	Monday – Last day to withdraw from the College of Medicine and receive an 80% refund	
January 15	Last day for candidates applying to the College of Medicine to submit their supplemental application materials	
January 21	Monday – First and second year students – MARTIN LUTHER KING JR'S BIRTHDAY HOLIDAY	
January 22	Sunday – Tuition deadline for all students	
February 6	Wednesday – Last day to withdraw from the College of Medicine and receive a 50% refund	
Feb 25 – Mar 1	Monday-Friday – SPRING BREAK for first-year students	
March 11-15	Monday-Friday – SPRING BREAK for second-year students	
April 25 & 26	Thursday-Friday – MINI BREAK for first-year students	
May 3	Friday – End of academic year for second-year students	
May 10	Friday – End of academic year for fourth-year students	
May 11	Saturday – College of Medicine Graduation	
May 27	Monday – MEMORIAL DAY HOLIDAY for first-year students	
June 28	Friday – End of academic year for first-year students	
June 30	Monday – Special graduation date	
July 12	Friday – End of academic year for third-year students	
July 13, 15-19, 22-24	CPX Exam	

## **Enrollment Dates**

First Year	7/30/12 to 6/28/13
Second Year	8/6/12 to 5/3/13
Third Year	7/26/12 to 7/12/13
Fourth Year	7/30/12 to 5/10/13

Winter Break Graduation

12/15/12 to 1/2/13 5/11/13

### First Year 2012-2013 TBD

## Second Year 2012-2013

TBD

## Third Year - 2012-2013

July 26 - July 12 July 13, 15-19, 22-24 CPX

### Fourth Year 2012-2013

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(updated 10/30/09)

## 49 UNIVERSITY OF KENTUCKY COLLEGE OF MEDICINE 2014-2015 Academic Year

2014 Fall Semester			
July 2 & 3	Thursday & Friday – Third-year general orientation		
July 7 July 7	Monday – Third-year students begin rotations Monday – Last day for third-year students to withdraw from the College of Medicine for a full refund of tuition & fees		
July 7 July 7	Monday – Fourth-year rotations begin Monday – Last day for fourth-year students to withdraw from the College of Medicine for a full refund of tuition & fees		
July 14	Monday – Last day for third-year and fourth-year students to withdraw from the College of Medicine and receive and 80% refund		
August 4 August 4	Monday – First-year students begin orientation Monday – Last day for first-year students to withdraw from the College of Medicine for a full refund of tuition & fees		
August 11	Monday – Last day for first-year students to withdraw from the College of Medicine and receive an 80% refund		
August 11 August 11	First-year students begin classes Second-year students begin classes		
August 11	Monday – Last day for second-year students to withdraw from the College of Medicine for a full refund of tuition & fees		
August 18	Monday – Last day for second-year students to withdraw from the College of Medicine and receive an 80% refund		
August 22	Monday – Tuition deadline for all students		
September 1	Monday – First and second-year students – Labor Day Holiday		
September 8	Monday – Last day to withdraw from the College of Medicine and receive a 50% refund		
November 1	Last day for candidates applying to the College of Medicine to submit their application to AMCAS		
Nov 26-30	Wednesday-Sunday – First and second-year students – Thanksgiving Holiday		
December 20	Saturday – Winter Break begins		

### <sup>50</sup> UNIVERSITY OF KENTUCKY COLLEGE OF MEDICINE 2014-2015 Academic Year

## 2015 Spring Semester

January 5 January 5	Monday – All students return to class Monday – Last day to withdraw from the College of Medicine and receive a full refund	
January 12	Monday – Last day to withdraw from the College of Medicine and receive an 80% refund	
January 15	Last day for candidates applying to the College of Medicine to subm their supplemental application materials	
January 19	Monday – First and second year students – Martin Luther King Jr.'s Birthday Holiday	
January 22	Wednesday – Tuition deadline for all students	
February 2	Monday – Last day to withdraw from the College of Medicine and receive a 50% refund	
March 2-6	Monday-Friday – Spring Break for first-year students	
March 16-20	Monday-Friday – Spring Break for second-year students	
Apr 30 & May 1	Thursday-Friday – Mini Break for first-year students	
May 1	Friday – End of academic year for second-year students	
May 15	Friday – End of academic year for fourth-year students	
May 16	Saturday – College of Medicine Graduation	
May 25	Monday – Memorial Day Holiday for first-year students	
June 19	Friday – End of academic year for third-year students	
June 20, 22-27, 29-30	CPX Exam Class of 2016	
June 30	Monday – Special graduation date	
July 2	Thursday – End of academic year for first-year students	

## Enrollment Dates 2014-2015

First Year	8/4/14 to 7/2/15	Winter Break	12/20/14 to 1/4/15
Second Year	8/11/14 to 5/1/15	Graduation	5/16/15
Third Year	7/2/14 to 6/19/15		
Fourth Year	8/4/14 to 5/15/15		

## First Year 2014-2015 TBD

### Second Year 2014-2015

TBD

### Third Year 2014-2015

July 2 & 3 Orientation July 7 to June 19 **Clinical Rotations** July 7 to Aug 1 Block 1 Aug 4 to Aug 29 Block 2 Sept 2 to Sept 26 Block 3 (Starts on Tuesday due to Labor Day holiday) Sept 29 to Oct 24 Block 4 Oct 27 to Nov 21 Block 5 Nov 24 to Dec 19 Block 6 Jan 5 to Jan 30 Block 7 Feb 2 to Feb 27 Block 8 Mar 2 to Mar 27 Block 9 Mar 30 to Apr 24 Block 10 Apr 27 to May 22 Block 11 May 26 to June 19 Block 12 (Starts on Tuesday due to Memorial Day holiday)

June 20, June 22-27, June 29-30: CPX for the class of 2016

### Fourth Year 2014-2015

July 7 to Aug 1 Period 1 Aug 4 to Aug 29 Period 2 Sept 2 to Sept 26 Period 3 (Starts on Tuesday due to Labor Day holiday) Sept 29 to Oct 24 Period 4 Oct 27 to Nov 21 Period 5 Nov 24 to Dec 19 Period 6 Jan 5 to Jan 30 Period 7 Feb 2 to Feb 27 Period 8 Mar 2 to Mar 27 Period 9 TBD Dean's Colloquium May 16 Graduation

# Doctor of Pharmacy Program PharmD 2012 to 2013

# 2012 Fall Semester

August 15, 2012	Wednesday	Orientation for 1 <sup>st</sup> Year Professional Students	
August 16, 2012	Thursday	Professional Development Workshop	
August 17, 2012	Friday		
August 20, 2012	Monday	First Day of Classes for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
August 21, 2012	Tuesday	Last day for a student to cancel registration with the University Registrar for a full	
		refund of tuition and fees	
August 22, 2012	Wednesday	Tuition Deadline for All Students	
August 28, 2012	Tuesday	Last Day to Add a Class for the 2012 Fall Semester	
August 28, 2012	Tuesday	Last day for a student to cancel registration with the University Registrar for a 80%	
		refund of tuition and fees	
September 3, 2012	Monday	Labor Day – Academic Holiday	
September 10, 2012	Monday	4 <sup>th</sup> Year Professional Students begin Rotation Block 4	
September 12, 2012	Wednesday	Last day to drop a course without it appearing on the student's transcript	
September 14, 2012	Friday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
September 15, 2012	Saturday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
September 17, 2012	Monday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
September 19, 2012	Wednesday	Last day for a student to cancel registration with the University Registrar for a 50%	
		refund of tuition and fees	
October 14, 2012	Friday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
October 15, 2012	Saturday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
October 17, 2012	Monday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
October 29, 2012	Monday	4 <sup>th</sup> Year Professional Students begin Rotation Block 5	
October 29, 2012	Monday	Priority Registration for the 2013 Spring Semester	
November 2, 2012	Friday	Last day to withdraw from the University.	
November 9, 2012	Friday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
November 10, 2012	Saturday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
November 12, 2012	Monday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
November 21, 2012	Wednesday	Thanksgiving	
November 22, 2012	Thursday	Academic Holidays	
November 23, 2012	Friday		
December 7, 2012	Friday	Last Day of Classes for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
December 10, 2012	Monday	4 <sup>th</sup> Year Professional Students begin Rotation Block 6	
December 10, 2012	Monday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
December 11, 2012	Tuesday	Final Exams for 1 <sup>st</sup> 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
December 12, 2012	Wednesday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
December 13, 2012	Thursday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
December 14, 2012	Friday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
,	,	End of the 2012 Fall Semester	
December 16, 2012	Sunday	Deadline for submission of grades to the Registrar's Office	
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# Doctor of Pharmacy Program PharmD 2012 to 2013

# 2013 Spring Semester

· ·	CLASS Workshop for 1 <sup>st</sup> Year Professional Students	
Thursday	First Day of Classes for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
Tuesday	Last day for a student to cancel registration with the University Registrar for a full	
	refund of tuition and fees	
Tuesday	Last Day to Add a Class for the 2013 Spring Semester	
Tuesday	Last day for a student to cancel registration with the University Registrar for a 80%	
	refund of tuition and fees	
Monday	Martin Luther King, Jr. Birthday – Academic Holiday	
Wednesday	Tuition Deadline for All Students	
Friday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
Saturday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
Monday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
Monday	4 <sup>th</sup> Year Professional Students begin Rotation Block 7	
Wednesday	Last day to drop a course without it appearing on the student's transcript	
Wednesday	Last day for a student to cancel registration with the University Registrar for a 50%	
	refund of tuition and fees	
Friday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
Saturday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
Monday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
Monday	Spring Vacation	
Tuesday	Academic Holidays	
Wednesday		
Thursday		
Friday		
Monday	4 <sup>th</sup> Year Professional Students begin Rotation Block 8	
Monday	Priority Registration for the 2013 Summer Term and 2013 Fall Semester	
Friday	Last day to withdraw from the University.	
Friday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
Saturday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
Monday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
Friday	Last Day of Classes for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
Monday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
Tuesday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
Wednesday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
Thursday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
Friday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
Friday	End of the 2013 Spring Semester	
Friday	Graduation Ceremony for the Class of 2013	
Sunday	Deadline for submission of grades to the Registrar's Office	
Juliuay	Beddine for submission of grades to the negistral s office	
	Tuesday Tuesday Tuesday Tuesday Monday Wednesday Friday Saturday Monday Wednesday Wednesday Wednesday Wednesday Friday Saturday Monday Monday Tuesday Wednesday Friday Friday Friday Friday Friday Friday Friday Monday Friday Konday Friday Konday Friday Friday Konday Friday Friday Konday Friday Friday Friday Konday Friday Friday Friday Konday Friday Friday Konday Friday Friday Konday Friday Friday Friday Konday Friday Friday Konday Friday Konday Friday Konday Friday Konday Friday Konday Konday Friday Konday Friday Konday Konday Friday Konday Friday Konday Friday Konday Friday Konday Friday Konday Friday Friday Konday Friday	

# Doctor of Pharmacy Program PharmD 2012 to 2013 2013 Summer Term

April 29, 2013 to August	31, 2013	College of Pharmacy 18 Week Summer Term
April 29, 2013	Monday	4 <sup>th</sup> Year Professional Students begin Rotation Block 1
May 6, 2013	Monday	1 <sup>st</sup> and 2 <sup>nd</sup> Year Professional Students begin Rotation Block A
May 22, 2013	Wednesday	Tuition Deadline for All Students
June 10, 2013	Monday	4 <sup>th</sup> Year Professional Students begin Rotation Block 2
June 10, 2013	Monday	1 <sup>st</sup> and 2 <sup>nd</sup> Year Professional Students begin Rotation Block B
July 22, 2013	Monday	1 <sup>st</sup> and 2 <sup>nd</sup> Year Professional Students begin Rotation Block C
July 29, 2013	Monday	4 <sup>th</sup> Year Professional Students begin Rotation Block 3

# Doctor of Pharmacy Program PharmD 2014 to 2015 (Tentative) 2014 Fall Semester

August 13, 2014	Wednesday	Orientation for 1 <sup>st</sup> Year Professional Students	
August 13, 2014 August 14, 2014	Thursday	Professional Development Workshop	
August 15, 2014	Friday		
August 13, 2014	Monday	First Day of Classes for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
August 19, 2014	Tuesday	Last day for a student to cancel registration with the University Registrar for a full	
August 19, 2014	Tuesuay	refund of tuition and fees	
August 22, 2014	Friday	Tuition Deadline for All Students	
August 26, 2014	Tuesday	Last Day to Add a Class for the 2014 Fall Semester	
August 26, 2014	Tuesday	Last day for a student to cancel registration with the University Registrar for a 80%	
August 20, 2014	Tuesuay	refund of tuition and fees	
September 1, 2014	Monday	Labor Day – Academic Holiday	
September 8, 2014	Monday	4 <sup>th</sup> Year Professional Students begin Rotation Block 4	
September 10, 2014	Wednesday	Last day to drop a course without it appearing on the student's transcript	
September 12, 2014	Friday	Evans for 1 <sup>st</sup> 2 <sup>nd</sup> and 3 <sup>rd</sup> Vear Professional Students	
September 13, 2014	Saturday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
September 15, 2014	Monday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
September 17, 2014	Wednesday	Last day for a student to cancel registration with the University Registrar for a 50%	
September 17, 2014	weunesuay	refund of tuition and fees	
October 10, 2014	Friday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
October 11, 2014	Saturday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
October 13, 2014	Monday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
October 27, 2014	Monday	4 <sup>th</sup> Year Professional Students begin Rotation Block 5	
October 27, 2014	Monday	Priority Registration for the 2015 Spring Semester	
October 31, 2014	Friday	Last day to withdraw from the University.	
November 7, 2014	Friday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
November 8, 2014	Saturday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
November 10, 2014	Monday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
November 26, 2014	Wednesday	Thanksgiving	
November 27, 2014	Thursday	Academic Holidays	
November 28, 2014	Friday		
December 5, 2014	Friday	Last Day of Classes for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
December 8, 2014	Monday	4 <sup>th</sup> Year Professional Students begin Rotation Block 6	
December 8, 2014	Monday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
December 9, 2014	Tuesday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
December 10, 2014	Wednesday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
December 11, 2014	Thursday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
December 12, 2014	Friday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
December 12, 2014	Friday	End of the 2014 Fall Semester	

# Doctor of Pharmacy Program PharmD 2014 to 2015 (Tentative) 2015 Spring Semester

January 9, 2015	Friday	CLASS Workshop for 1 <sup>st</sup> Year Professional Students	
January 5, 2015	Monday	First Day of Classes for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
January 6, 2015	Tuesday	Last day for a student to cancel registration with the University Registrar for a	
		full refund of tuition and fees	
January 13, 2015	Tuesday	Last Day to Add a Class for the 2015 Spring Semester	
January 13, 2015	Tuesday	Last day for a student to cancel registration with the University Registrar for a	
		80% refund of tuition and fees	
January 19, 2015	Monday	Martin Luther King, Jr. Birthday – Academic Holiday	
January 22, 2015	Thursday	Tuition Deadline for All Students	
January 24, 2015	Monday	4 <sup>th</sup> Year Professional Students begin Rotation Block 7	
January 30, 2015	Friday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
January 31, 2015	Saturday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
February 2, 2015	Monday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
February 4, 2015	Wednesday	Last day to drop a course without it appearing on the student's transcript	
February 11, 2015	Wednesday	Last day for a student to cancel registration with the University Registrar for a	
		50% refund of tuition and fees	
February 27, 2015	Friday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
February 28, 2015	Saturday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
March 2, 2015	Monday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
March 16, 2015	Monday	4 <sup>th</sup> Year Professional Students begin Rotation Block 8	
March 16, 2015	Monday	Spring Vacation	
March 17, 2015	Tuesday	Academic Holidays	
March 18, 2015	Wednesday		
March 19, 2015	Thursday		
March 20, 2015	Friday		
March 23, 2015	Monday	Priority Registration for the 2015 Summer Term and 2015 Fall Semester	
March 27, 2015	Friday	Last day to withdraw from the University.	
April 3, 2015	Friday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
April 4, 2015	Saturday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
April 6, 2015	Monday	Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
April 24, 2015	Friday	Last Day of Classes for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
April 27, 2015	Monday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
April 28, 2015	Tuesday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
April 29, 2015	Wednesday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
April 30, 2015	Thursday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
May 1, 2015	Friday	Final Exams for 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Year Professional Students	
May 1, 2015	Friday	End of the 2015 Spring Semester	
May 8, 2015	Friday	Graduation Ceremony for the Class of 2015	
May 10, 2015	Sunday	Deadline for submission of grades to the Registrar's Office	
May 10, 2015	Sunday	Class of 2015 Graduation	

# Doctor of Pharmacy Program PharmD 2014 to 2015 (Tentative) 2015 Summer Term

May 4, 2014 to September 5, 2014		College of Pharmacy 18 Week Summer Term	
May 4, 2015	Monday	4 <sup>th</sup> Year Professional Students begin Rotation Block 1	
May 11, 2015	Monday	1 <sup>st</sup> and 2 <sup>nd</sup> Year Professional Students begin Rotation Block A	
May 22, 2015	Thursday	Tuition Deadline for All Students	
June 15, 2015	Monday	4 <sup>th</sup> Year Professional Students begin Rotation Block 2	
June 15, 2015	Monday	1 <sup>st</sup> and 2 <sup>nd</sup> Year Professional Students begin Rotation Block B	
July 20, 2015	Monday	1 <sup>st</sup> and 2 <sup>nd</sup> Year Professional Students begin Rotation Block C	
August 3, 2015	Monday	4 <sup>th</sup> Year Professional Students begin Rotation Block 3	

#### 2012-2013 Winter Intersession

- October 15, 2012 Monday Priority deadline for admission to the Winter Intersession
- October 29 November 20, 2012 Monday through Tuesday, Priority registration for Winter Intersession
- November 16, 2012 Friday Winter Intersession registration for newly-admitted students
- December 14, 2012 Friday Deadline for admission to the Winter Intersession
- **December 14, 2012** Friday Last day a student may drop a course or cancel registration with the University Registrar for a full refund of fees
- December 17, 2012 Monday First day of class
- December 17, 2012 Monday Last day to add a class for the 2012-2013 Winter Intersession
- December 17, 2012 Monday Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund
- **December 21, 2012** Friday Last day to officially withdraw from the University or reduce course load and receive a 50 percent refund
- December 21, 2012 Friday Last day to drop a course without it appearing on the student's transcript
- **December 21, 2012** Friday Last day to change a grading option (pass/fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit)
- December 25 January 1 Tuesday through Tuesday Academic Holidays
- January 2, 2013— Wednesday Last day to withdraw from the University or reduce course
- load. Students can withdraw or reduce course load after this date only for urgent non-academic reasons.
- January 8, 2013 Tuesday Final Examinations
- January 8, 2013 Tuesday End of 2012-2013 Winter Intersession
- January 11, 2013—Friday—final deadline for submission of grades to the Registrar's Office by 12 noon

### 2014-2015 Winter Intersession-tentative

- October 15, 2014 Wednesday Priority deadline for admission to the Winter Intersession
- November 3 November 25, 2014 Monday through Tuesday, Priority registration for Winter Intersession
- November 21, 2014 Friday Winter Intersession registration for newly-admitted students
- December 19, 2014 Friday Deadline for admission to the Winter Intersession
- **December 19, 2014** Friday Last day a student may drop a course or cancel registration with the University Registrar for a full refund of fees
- December 22, 2014 Monday First day of class
- December 22, 2014 Monday Last day to add a class for the 2014-2015 Winter Intersession
- December 22, 2014 Monday Last day to officially withdraw from the University or reduce course load and receive an 80 percent refund
- December 25 January 1 Thursday through Thursday Academic Holidays
- January 2, 2015 Friday Last day to officially withdraw from the University or reduce course load and receive a 50 percent refund
- January 2, 2015 Friday Last day to drop a course without it appearing on the student's transcript
- January 2, 2015 Friday Last day to change a grading option (pass/fail to letter grade or letter grade to pass/fail; credit to audit or audit to credit)
- January 9, 2015— Friday Last day to withdraw from the University or reduce course load. Students can withdraw or reduce course load after this date only for urgent non-academic reasons.
- January 13, 2015 Tuesday Final Examinations
- January 13, 2015 Tuesday End of 2014-2015 Winter Intersession
- January 16, 2015—Friday—final deadline for submission of grades to the Registrar's Office by 12 noon

## University Senate December 12, 2011

## Establishment of Senate Committee to Serve as Faculty of Record for the Honors Program

- Prior to 2005: Faculty who taught in the Honors Program had a split appointment between Honors and their home departments. Therefore, there was a clear body of faculty to be responsible for the Honors curriculum, etc.
- Since 2005: The Honors Program instituted "tracks", and faculty who were teaching Honors courses no longer had a split appointment the only appointment was the academic department. Therefore, there is no longer a clear Honors Program faculty.

There are a variety of ideas about how to revise and expand the Honors Program. However, there is no formal body of Honors Program faculty, and only the faculty responsible for the program can propose changes to the curriculum.

At the Senate Council meeting on Monday, December 5, 2011, the SC unanimously approved a motion to create a body to serve as the Honors Program faculty.

Move that the Senate create a committee to serve as the faculty of record for the Honors Program, appointed by the Senate Council in consultation with the Associate Provost for Undergraduate Education. This Committee will be composed of 10 faculty broadly representative of the undergraduate colleges; the Committee will report to the Director of Honors, to whom it shall transmit its recommendations for consideration by the Undergraduate Council.

<u>Recommendation</u>: that the Senate create an Honors Program Committee, appointed by the Senate Council in consultation with the Associate Provost for Undergraduate Education, to act as the faculty of record for all Honors curriculum. This Committee will be composed of 10 faculty broadly representative of the undergraduate colleges; the Committee will report to the Director of Honors, to whom it shall transmit its recommendations for consideration by the Undergraduate Council.

#### February 11, 2011

Please accept the attached documentation as part of our application to create a Graduate Certificate in International Education (IE). The purpose of this graduate certificate is to prepare graduate students for careers in international education, including but not limited to education abroad, international student services, and placement in other international organizations which support the exchange of students.

The field of international education is a critical component of the internationalization of higher education in the United States and abroad. This certificate is designed for any graduate student (or admitted post-baccalaureate student) wishing to enhance their graduate degree. We believe this will help distinguish our students and make them more competitive for careers in this and related fields.

The proposed curriculum includes a combination of nine hours of core courses and six hours of elective coursework. In preparing to complete their certificate, students must identify a regional concentration, and are encouraged to participate in some form of professional or experiential learning opportunity to acquire skills in management, program development, and/or assessment. Although the certificate does not require language coursework as part of the curriculum, participants are also required to describe their language proficiency relative to their professional and regional concentration so that they are aware of and prepared to be competitive in the field.

Dr. Beth Goldstein will serve as the first IE Graduate Certificate Director and will be supported by an IE Advisory Committee comprised of a group of faculty and international education administrators from across the university who has been working on this project for over a year. The initial proposal was presented to, and approved by, the Graduate Faculty in Educational Policy Studies & Evaluation.

We believe the proposal is now ready for consideration by the College of Education Courses and Curriculum Committee. Documents within this submission include: IE Certificate summary and procedures, the IE Certificate Application, and the IE Certificate Course of Study and Regional Competency Proposal. Please do not hesitate to contact me directly if you need any additional information.

Sincerely,

Jane Jensen Associate Professor Director of Graduate Studies

# **Proposal for a Graduate Certificate in International Education**

Submitted by Drs. Jane Jensen & Beth L. Goldstein, Department of Educational Policy Studies & Evaluation (with support and assistance from Dr. Tony Ogden, Education Abroad, Dr. Susan Carvalho, International Education, and Dr. Linda Worley, Modern Languages).

## **Overview:**

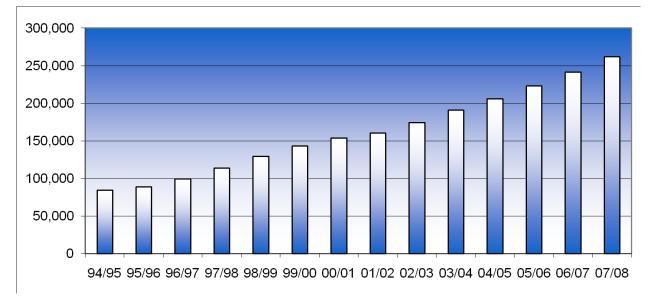
The goal of this certificate program is to prepare graduate students for careers in international education, including but not limited to education abroad, international student services, and placement in other international organizations which support the exchange of students. Students will receive a foundation in comparative higher education, organization and administration in higher education, and student services. Through elective courses appropriate to student interests, students will develop a regional area of cultural expertise and participate in at least one professional vocational experience with an emphasis on developing skills in evaluation, management, and program development.

Particular base skills and knowledge needed for such work include

- understanding how formal education operates within and across nations (coursework in: comparative/international education; higher education)
- familiarity with programming, services, laws and regulations for students entering and enrolled in higher education
  - (coursework in: student services, higher education)
- intercultural understanding and communication (world language experience, international in situ experience, regional area studies)
- professional experience (work experience, internship, graduate assistantship; elective coursework in program evaluation or research design)

# Background:

Over the past few decades, international student exchange has steadily increased with significant gains in recent years. As illustrated in the chart below, participation in education abroad by US college students has increased from approximately 80,000 to 260,000 students per year between the 1994/95 and 2007/08 academic years (Institute of International Education: OpenDoors "US Study Abroad Trends," 2011). Federal Legislation such as the proposed Simon Act and the establishment of global higher education areas like those in the European Union and Asia have led to increases in government support of exchange as well as new opportunities for post-secondary educational experiences. Professional positions in student advising, program development, and assessment of program outcomes have also increased to serve this mobile student population.



## Growth in Number of US Students Studying Abroad 1993/94-2007/08 Academic Years

(Institute of International Education: OpenDoors "US Study Abroad Trends," 2011, p.24).

The educational needs of this professional community include many of the same knowledge and skill sets as those held by higher education practitioners in general. Additional skills in intercultural communication and living, language proficiencies, and knowledge of differences within and between international educational contexts are necessary. Furthermore, many international education offices serve as "one-stop-shops" in which practitioners are asked to wear many hats. Thus, training in evaluation, management, and program development is also recommended. See Appendix A for examples of best practices in international education graduate programming.

The proposed graduate certificate directly builds from the Department of Educational Policy Studies and Evaluation strategic goals to increase its comparative and international education strand in both research and graduate student programming. This proposal also aligns with the University of Kentucky's Internationalization Plan, particularly the very first goal to "Enhance international educational opportunities at the University of Kentucky".

The Department of Educational Policy Studies & Evaluation has a rich traditional of international study and travel among its faculty. Currently the following faculty members have active research programs in international contexts and/or international education. Additional faculty strengths in assessment and measurement, college teaching and learning, and higher education organization and administration will also support this certificate proposal.

- Dr. Alan DeYoung (Chair): Education Reform in Central Asia
- Dr. Jane Jensen (DGS): Director of the Appalachian Center Rome Exchange & Co-PI on FIPSE Atlantis Grant with Italy and France

- Dr. Beth Goldstein: past Co-Director Asia Center, current higher education projects in China and Indonesia
- Dr. John Thelin: Guest lecturer on higher education in Japan, Belgium, France, and several Eastern European countries
- Dr. Tony Ogden (Adjunct Faculty): Director UK Education Abroad

# **Certificate Recruitment & Admission Process**

Similar to the Graduate Certificate in College Teaching and Learning, the Certificate in International Education is intended to supplement or enhance any graduate program at the University of Kentucky or postbaccalaureate students enrolled at the University of Kentucky. The processes for application and admission are the same as those for the College Teaching and Learning Certificate.

Graduate students from programs other than those in Education already enroll in the Department of Educational Policy Studies & Evaluation's internationally focused courses; some also complete a second masters with us. In recent semesters this has included graduate students from MCL (German Studies especially) and the Patterson School of Diplomacy. These students and others have expressed strong interest in such a certificate. While we have not undertaken any formal survey to assess interest in this prospective certificate, Dr. Linda Worley (from MCL), Dr. Tony Odgen (OIA) and Dr. Susan Carvalho (OIA and Spanish) served on the committee that designed the certificate expressly to help make sure that the certificate would serve constituents students outside as well as in Education.

**Recruitment:** This certificate is designed for students pursuing graduate degrees in higher education or students pursuing other graduate degrees who wish to add a practical international component. Post-baccalaureate and visiting students are also eligible to apply for the IE certificate. Directors of Graduate Studies in the following departments in particular would be made aware of the certification and its potential:

Modern & Classical	Political Science	International Studies
Languages	Anthropology	Agriculture
	Geography	Diplomacy
Hispanic Studies History	Public Policy	Behavioral Sciences

**Application Process:** Application for the IE Certificate must be made before completion of coursework for the certificate. Award of the Graduate Certificate in International Education requires formal admission to the certificate, approval of a Course of Study Worksheet and Certificate Completion Worksheet. Admission to the IE Certificate Program requires that applicants:

- Satisfy requirements of the graduate school for admission to certificates ((see the\_Guidelines for Graduate Certificates). \*\*
- Submit a letter of support from the graduate advisor (for current graduate students), DGS (for new graduate students), or research supervisor (for postdoctoral students). Individuals who are non-degree-seeking, have already received their doctorate or other terminal degree, and/or who are enrolling at UK only for the Certificate must submit two letters of recommendation.
- Complete the certificate application form

\*\*Applicants who are not currently matriculating for a graduate degree at the University of Kentucky must first secure admission to the Graduate School as post-baccalaureate students. Admission to the Graduate School must, in all cases, precede admission to the International Education Graduate Certificate Curriculum. Please notice that some requirements for the IE Graduate Certificate Course of Study exceed minimum requirements of the Graduate School for Post- baccalaureate status. For this reason, as well as others, admission to the Graduate School does not guarantee admission to the International Education Graduate Certificate Course of Study.

Admissions Process: Applications will be reviewed by the Certificate Director to assure that the student meets University enrollment requirements, is a student in good standing, has clearly articulated goals for professional development in this field that can be met through completion of the certificate, and has the support of their home department.

## **Learning Objectives:**

In addition to the rich set of experiences each student brings from their home graduate department, the proposed certificate is intended to provide the following additional skills and knowledge sets:

- Knowledge of best practices in undergraduate Student Services, including Education Abroad and International Student Services.
- A comparative understanding of academic policies, organization and administration of higher education institutions in the United States and abroad.
- An understanding of how to identify program learning objectives behind international study and affective frameworks for evaluation and assessment of those goals.
- An ability to design recruitment, orientation, program implementation, and follow up activities for an assortment of international education programming, including developing budgets and data management systems.

# **Course of Study (15 Credits)**

(NOTE: This proposal does NOT include any new course applications. All courses listed or discussed below are existing courses. Additional elective courses may be developed in response to needs of students within existing faculty resources.)

## **Required Courses (9 Credits):**

**EPE 555 Comparative Education** (3): This course introduces the use of comparative study for global and cross-cultural examination of education. The course uses selected educational systems, with an emphasis on the peoples of Asia and Africa, to learn about education in cultural, political, economic, and historical contexts. Comparison will be made of educational structures, institutions, policies and pedagogies as they engage their socio-political contexts at the local, state, international levels. We will consider issues of globalization, democracy and control, markets, and equity and social justice. Finally we will note the various methods of comparison used to study change from an international perspective.

**EPE 632 Student Services** (3): This course focuses on students services (broadly defined) and those who work with college and university students outside of the academic arena. The course not only

surveys the history of student services but critically examines its theoretical bases and current practices with special attention paid to the relationship between student services and other segments of campus, including education abroad and international student services.

**EPE 676 Organization and Administration in Higher Education** (3): This course introduces the purposes and scope of higher education, organization, general administration, faculty administration, inter-institutional cooperation, and allocation of financial resources. Students also explore different state systems of higher education in the US, international models of higher education and relationships within higher education areas.

**Elective Courses (6 Credits):** In consultation with their department advisor and the Certificate Director, students should choose <u>two</u> electives from the following attached list of suggested courses with an eye toward developing an in-depth area of professional expertise for a particular "field". Because of the breadth of possibilities for regional study, a complete list of approved courses is unreasonable. Furthermore, the choice of focus for an individual's graduate certificate will depend on that person's undergraduate coursework, professional and personal experience prior to entering the certificate program, professional goals, and graduate degree/s major. Students must therefore work with the Certificate Director and their major professor or program advisor to design the best course of study for their needs using the attached Course of Study & Regional Concentration Proposal form.

For an individual to have professional credibility in the areas of international educational exchange and student services in higher education, the above identified required courses (totaling a bare nine hours) cover the essential areas of expertise required of all related programs we could identify (See Appendix A for examples). These areas include some knowledge of 1) international/comparative education, 2) the workings of higher education, and 3) student services. Given the construct of graduate certificates at UK, that only leaves six hours of elective/regional courses. However, we assume that individuals with these career goals will very likely complete coursework beyond the minimal elective/regional requirement. Some of this may have been completed before enrolling in the current degree. This would certainly be the case for a German major, for example. Further significant knowledge will come from international field experience and from meeting the professional competence requirement.

### Additional Recommendations for Planning the Course of Study:

Language Proficiency: The level of language proficiency recommended of each individual will be determined in consultation with the Certificate Director in light of the student's professional and regional concentration. All certificate students will be required to have completed the minimum world language proficiency level set for UK undergraduates and many will be expected to reach an intermediate-mid ACTFL level. These are understood as minimum requirements, ones that can be raised by the Director in consultation with individual students. On a case-by-case basis, the Certificate Director will determine whether a more advanced level of proficiency is appropriate based on what language experiences and proficiency fit the individual's career goals in relation to the certificate. We deliberately have left this flexible as some careers in international education with a focus on student services require more global expertise rather than a high level of bilingualism. At the

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same time, individuals must have some experience of learning and using a second language in order to work effectively in multilingual, multicultural contexts. Sufficient language experience (although perhaps not fluency) is critical to effectively understand the challenges that students participating in international exchange encounter. Thus, language proficiency, in this context, also implies the ability to assess different study abroad programs on a basic level, in terms of their approach to language learning. Experts in the field argue that comprehension of how language is taught and learned is more important than the actual communicative competency. Practically speaking, while communicating with an overseas partner in their first language is desirable and polite, it is not essential; however, a thorough understanding of the feeling of helplessness, frustration, pride etc that come with multilingual communication is the key factor. Students will be expected to describe the level of language proficiency they have obtained relative to their professional and regional concentration in the attached Course of Study & Regional Competency Proposal form.

<u>Professional Competence</u>: to complete the certificate, candidates are encouraged to demonstrate competency in an area of professional practice appropriate to their interests. These include methods of management, evaluation and assessment, event planning, faculty and program development. These may be acquired through internship or other forms of experiential learning (e.g. graduate assistantship). Students pursuing this certificate are strongly encouraged to apply for internship and experiential learning opportunities abroad. Some experience of international living is a requirement. That experience may have occurred prior to beginning the certificate. Students will be expected to provide evidence of their professional competency as part of their Course of Study & Regional Competency Proposal form.

## **Certificate Administration**

The Certificate director will be appointed from among the faculty in the Department of Educational Policy Studies & Evaluation with expertise in international higher education, with a three-year, renewable appointment. The Director will be the person primarily responsible for recruitment, management and advising of the certificate. The Director will also be the liaison with the academic department of the student regarding questions about elective and regional concentration. Staff support will be provided by the Dept. of Educational Policy Studies. The Certificate will be further guided by an advisory committee comprised of faculty from the targeted graduate programs described above along with one professional staff person from the Office of International Affairs. These individuals will serve three year, renewable appointments. This committee will regularly review curriculum requirements, consider student petitions for course inclusion, assess quality of the experiential learning components, and evaluate overall program quality.

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## Appendix A: Best Practices in Graduate International Education

The following programs offer examples of best practices for providing a high quality graduate education in this field:

### [A] Program in Intercultural Service, Leadership, and Management (PIM)

SIT Graduate Institute, Brattleboro, Vermont [http://www.sit.edu/graduate/]

Within the profession of international education, the premier institution for graduate study is World Learning's School for International Training (SIT), located in Brattleboro, Vermont. SIT provides a comprehensive education in the historical, theoretical, and social foundations of international education. Within the PIM program, students may chose to do the Master of Arts in International Education program with optional concentrations in international education advising and educational exchange management. In addition to the numerous management courses available, students may chose among the following sample listing of courses:

- International Educational Policy
- International Education Design and Delivery
- Theory and Practice of International Education
- Program Planning and Project Design
- [B] Master Of Arts in Intercultural Relations

Lesley University, Cambridge, Massachusetts

http://www.lesley.edu/offcampus/term/nmagss\_intercultural.html

The Master of Arts in Intercultural Relations program prepares students to facilitate intercultural relations in a variety of professional settings, both domestically and internationally. The program's focus on the human dimension of intercultural interactions sets it apart from the traditional macro-political approach of international relations programs. Students complete a series of core courses and choose from electives in an area of professional interest, such as International Education Exchange and International Student Advising Coursework is followed by an internship in a professional setting, either in the U.S. or abroad.

[C] Comparative and International Development Education (CIDE)

University of Minnesota - Twin Cities, Minneapolis, Minnesota

http://cehd.umn.edu/EdPA/cide/default.html

- Issues Seminar in International Education
- International Education Design Concepts and Evaluation
- Issues Seminar in International Education Programming

This program is for those interested in 1) comparative and international development education, 2) international educational exchange/International education, and 3) global youth policy and leadership. Within the international education concentration, students may chose among the following sample listing of courses:

- The internationalization of higher education
- The internationalization of K-12 education (global education)
- Study abroad program administration and programming
- International education administration: higher education level

- Teaching and administration in international schools: K-12 level
- International educational exchange programs
- Intercultural education and training
- Cultural adjustment and learning

Please note that the above programs at SIT Graduate Institute in Vermont and at Lesley University are both Masters degree programs. Therefore their requirements are more extensive than are ours, averaging 36+ credit hours. Core courses in both programs parallel those we are requiring and recommending (comparative/international education, institutional organization, and intercultural knowledge). The PIM MA options at SIT have three language options: one world language other than English at ACFTL Advanced level, two at ACTFL Intermediate-High, or an intercultural communication option that includes two semesters of a language plus cultural and field-based experience (similar to what we propose as our base). Lesley College's MA has as a non-credit requirement "competency verbal and written in at least one language in addition to English." No ACTFL level was given.

UMN's CIDE options include a full doctoral program and a graduate minor of 9-12 credit hours. The minor focused on international education exchange requires 9-12 credit hours of coursework similar to our proposed coursework, and no world language requirement.

In all of above examples, targeted constituencies include people with career goals in international education exchange, internationalization of education K-12 and higher education, and NGOs, as examples.

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### **Appendix B: Suggested Elective Courses**

(each student's Course of Study should be designed to meet their professional and regional interests)

### Education

EPE 790 Internship in International Education (3) EPE798 Seminar in Higher Education: International and Comparative Higher Education (3) EPE 653 History of Higher Education (3)

Modern & Classical Languages, Literatures & Cultures

FR450G Topic in French Culture FR550: France Today FR621: Twentieth-Century Studies FR630: French Language, Literature And Culture Outside France GER 507: Advanced Composition and Conversation: Modern Germany

### **Hispanic Studies**

SPA 438G Literature of Social Protest in Spanish America SPA 608 Special Topics in Spanish Literature And Culture

#### History

HIS526 Europe Since 1939 HIS 529 Women in Modern Europe HIS 535 Russia in the Twentieth Century HIS 537 Intellectual and Cultural History Of Russia From 1800 To Present HIS 541 History of Modern France Since 1815 HIS 543 German History Since 1918 HIS 549 History of The Middle East: 1952 To Present HIS 555 British History Since 1901 HIS 561 Culture, Ideas, and Society in Latin America HIS 563 The History Of Women In Latin America

Political Science PS411G Comparative Government-Parlimentary Democracies I PS 415G Comparative Judicial Politics EPE773 Global Education and Popular Culture (3) EPE525 Special Topics in EPE: Research Design in International Education Outcomes Assessment (3)

GER 420G: Special Studies in German Literary and Cultural History Ger 650: Multidisciplinary German Studies Seminar Ger 721: Special Topics in German Literary and Cultural History

SPA 609 Special Topics in Latin American and U.S. Hispanic Literature and Culture

HIS 564 History of Brazil HIS 593 East Asian History Since World War Ii HIS 597 Westerners in East Asia, 1839 To The Present HIS 598 China in Revolution, 1895-1976 HIS 624 Readings in European History Of The Twentieth Century HIS 628 Colloquium on Modern European History HIS 637 Readings in Colonial Latin American History HIS 638 Readings in Latin American History HIS 722 Seminar in Modern European History, 1870 to The Present HIS 730 Seminar in Modern British History

PS 417G Survey of Sub-Saharan Politics PS 419G The Governments and Politics Of Eastern Asia

PS 420G Governments and Politics Of South Asia PS 428G Latin American Government and Politics PS 429G Government and Politics in Russia and the Post-Soviet States PS 436G International Organization PS 437G Dynamics of International Law PS 439G Contemporary International Problems	PS 538 Conflict And Cooperation In Latin American Relations PS 674 Proseminar in Theories Of International Politics PS 732 Comparative Foreign Policy PS 733 International Political Economy PS 735 Democracy and International Affairs PS 737 Transnational Organizations and Processes
Anthropology ANT431G Cultures and Societies Of Sub-Saharan Africa ANT 602 Seminar In Culture Dynamics ANT 731 Seminar In Social And Political Dynamics ANT 733 Seminar In Symbols And Meaning	ANT 736/SOC737 Culture, Environment And Development
<b>Geography</b> GEO 491G Japanese Landscapes GEO 546 Tourism & Recreational Geography	GEO 551 Japanese Multinational Corporations GEO 720 Regional Studies
<b>Community &amp; Leadership Development</b> CLD 665 Program Development and Evaluation	CLD 675 Community Development and Leadership Communications

**ESL & MCL**: Students should also check course registration requirements for coursework in world language teaching and instruction of English as a Second Language.

## Institute for Sustainable Manufacturing

### Brothers, Sheila C

From:	Farrell III, Herman D
Sent:	Monday, November 21, 2011 4:23 PM
То:	Swanson, Hollie
Cc:	Brothers, Sheila C
Subject:	ISM Proposal Recommendation from SAOSC
Attachments:	ISM responses to SOASC questions.docx

Dear Hollie Swanson:

The SAOSC met this morning to discuss the ISM proposal with Bob Gregory and Professor I.S. Jawahir. Last week they responded to our questions regarding the proposal. I have attached their written responses. In today's meeting members of the committee noted that the proposed transformation from the Center for Manufacturing to the Institute for Sustainable Manufacturing involves an internal college change and we expressed to Gregory and Jawahir, that if, in the future, the Institute for Sustainable Manufacturing expands to include educational units outside of the College of Engineering, such an expansion should be presented to the SAOSC, SC and US for further review. The members of the committee also took note of the written response to the committee's question regarding the "ISM Membership" funding mechanism (Appendix 3, page 19) and was assured by Gregory and Jawahir that any agreement involving such "ISM Membership" will be submitted for approval by the appropriate UK entities (ie, Office of Legal Counsel, Office for Commercialization & Economic Development).

Only 5 members of the committee were present at the meeting this morning, thus, no quorum. But we did all unanimously support the proposal. I sent around an email to the rest of the committee this morning and we have obtained a majority in support of the below recommendation:

After reviewing the proposal for the creation of the Institute for Sustainable Manufacturing, and after corresponding with and meeting with Bob Gregory and Professor I.S. Jawahir regarding the proposal, the Senate Academic Organization and Structure Committee hereby recommends to the University Senate support for the creation of the Institute for Sustainable Manufacturing in the College of Engineering. It is further recommended that the Senate Council review the written responses to questions presented by the SAOSC as a supplement to the initial ISM proposal.

Sincerely,

Herman Farrell Chair, SAOSC

### Brothers, Sheila C

From: Sent:	Mary Watts [mwatts@engr.uky.edu] Friday, December 09, 2011 8:48 AM
То:	Swanson, Hollie; Brothers, Sheila C
Cc:	Eric Grulke; I. S. Jawahir; Lester, Thomas W; Bob Gregory; Keith Rouch; Lynn Tilley
Subject:	Faculty Vote Regarding the New Institute for Sustainable Manufacturing (ISM) in the College of Engineering

Following is the result of the electronic ballot conducted this week of College of Engineering Faculty on the issue of creating a new Institute for Sustainable Manufacturing (ISM) in the College of Engineering:

FAVOR: 76 OPPOSE: 13 ABSTAIN: 2

Faculty eligible to vote: 147

Mary

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Mary Watts Assistant to Dean Thomas Lester College of Engineering 357 Ralph G. Anderson Building University of Kentucky Lexington, KY 40506-0503 <u>mwatts@engr.uky.edu</u> (859) 257-4597 (phone) Committee questions and ISM responses

• What is the current status of the Center for Manufacturing? What is the history of the transition from the Center for Manufacturing to the proposed ISM?

The Center is inactive, awaiting approval of ISM. "Inactive" means it has no budget and no personnel assigned. The Dean will follow procedures to recommend closure of the center, beginning with a proposal to Engineering faculty, once ISM is approved.

• How will the proposed organizational structure for ISM compare/contrast to the organizational structure for the Center for Manufacturing?

In many ways, the organizational structure is similar. As before, the Institute director reports to the dean of the college and the director is guided by an external advisory board. The ISM will also have a University Advisory Board composed of chairs of the three related departments (i.e. those contributing faculty FTE to ISM) to advise on academic/administrative issues that might arise re collaboration and provide a regular channel for communication between the chairs and ISM. The departments are Mechanical Engineering, Chemical and Materials Engineering and Electrical and Computer Engineering. The college's Associate Dean for Research is also a member of this board.

• As noted in Footnote 1 on page 3 of the proposal, "ISM is a multidisciplinary research institute and is an "educational unit" within the meaning of UK GR-VII-A having as its primary mission instruction, research and service." UK GR-VII-A (7) states that, "a multidisciplinary research center or institute shall be administratively responsible to the Executive Vice President for Research unless specifically designated to another chief academic officer." Will the ISM be administratively responsible to the Executive for Research? Or another chief academic officer?

ISM reports directly to the College of Engineering Dean.

• UK GR-VII-A (7) also provides for a faculty advisory committee. Who will be on the faculty advisory committee for the ISM?

We consider the University Advisory Board (see above) as performing this function. In addition, the ISM core faculty meets biweekly to discuss ISM business and associated faculty are welcome to attend these meetings.

• Describe the level of faculty input (ie, voting rights) in the policy making process of the ISM.

ISM policy will be decided by a majority vote of the core faculty.

• How does the ISM proposal relate to other "sustainability" initiatives at the

### University of Kentucky?

ISM (which has an engineering/manufacturing focus) collaborates with the Faculty of the Environment (FotE) led by Dr. Paul Bertsch (which has a natural sciences/environmental focus) and ISM encourages individual research and education collaborations with other UK colleges, notably those currently with faculty in Gatton College, College of Design, and College of Education. Given the breadth of the issues involved with sustainability, which go well beyond engineering and the natural sciences, ISM research depends on multidisciplinary collaboration for its success.

• How will these proposed changes affect the education/workload of students?

The students primarily associated with ISM are research assistants to the various ISM faculty and have the same workload as any other research assistant in engineering; the impact on their education is beneficial in that students learning from their ISM mentors while performing research are gaining valuable experience in multidisciplinary collaboration and a broader perspective on their own discipline as part of a larger effort to tackle sustainability issues.

• Are there letters in support of this proposal from within the university (faculty, department chairs, Deans, etc.) as well as from supporters outside the university (i.e., industry/government in Kentucky, US, etc.)?

The Dean of the College of Engineering indicated his support with his cover letter submitting the proposal. We have attached his letter and letters from the relevant department chairs.

• The ISM proposal (on page 14) notes that a "QFD-based strategic business operational plan" will be available by June 30, 2011. Has the plan been created? If yes, please provide the SAOSC with a copy of the plan.

The planning process is not yet complete. It was paused for the summer while we awaited senate review so as to benefit from any further clarification as to ISM's obligations that might emerge from the review process. If approved, ISM will be expected to supply such a strategic plan to the dean.

• The ISM proposal (in Appendix 3, page 19) discusses the "Sustainment of the ISM" via "ISM membership" with "member firms providing cash support, in-kind contributions, equipment donations or direct-project sponsorship." Has this proposed funding mechanism been vetted by the appropriate UK entities (ie, Office of Legal Counsel, Office for Commercialization & Economic Development)?

We would submit any such agreement for approval before pursuing it. We felt a sample supplied with the proposal would be useful at this stage for informational purposes without being in any way an official document or agreement.

## **Executive Summary**

This proposal seeks to establish within the College of Engineering a new organization, developed out of the former Center for Manufacturing, to be called the *Institute for Sustainable Manufacturing (ISM).* 

Established in 1986 by the Commonwealth of Kentucky as the Center for Robotics and Manufacturing Systems, the Center for Manufacturing was a unique multidisciplinary program that conducted manufacturing research, transferred manufacturing technology to industry, and supported educational efforts in manufacturing. As a result of a strategic effort by the University of Kentucky to move to the forefront of new technologies and workforce development for the future of manufacturing, the Center for Manufacturing will now be transformed into the proposed Institute for Sustainable Manufacturing (ISM).

The purpose of the ISM is to advance progress toward sustainability, both nationally and internationally, by focusing on manufacturing.

The goals of the proposed ISM are to:

- (a) actively pursue academic research (basic and applied) with the goal of producing new and innovative manufacturing technologies at product, process and systems levels,
- (b) develop, deploy and commercialize new and innovative technologies and manage innovation,
- (c) perform effective dissemination of new knowledge generated, and
- (d) coordinate with graduate and undergraduate educational programs offered by the College and individual departments.

The ISM, if established, would be unique, the only university-based institute worldwide to focus on sustainability from a manufacturing perspective. Because it would serve as a model for how cross-disciplinary and inter-disciplinary research can be brought to bear successfully on urgent 21<sup>st</sup> century problems, the ISM would help bring talented and adventurous students and younger faculty with relevant and unique expertise to University of Kentucky and would raise the university's profile for innovative approaches to R&D and technology transfer. Bringing faculty together from a number of different colleges, departments and centers will create synergies that can enable more ambitious and effective research projects in sustainable manufacturing, and the successful pursuit of large-scale cross-disciplinary funding. The ISM's primary research goals include some of the nation's most urgent R&D priorities, such as creation of energy efficiency and environmentally benign net zero technologies for products and processes, and mentoring of the next generation scientific and technical workforce for sustainable manufacturing.

March 30, 2011

Dr. Kumble Subbaswamy, Provost University of Kentucky Lexington, KY 40506

Dear Dr. Subbaswamy:

I am requesting your approval for the creation of a new research institute in the College of Engineering entitled "Institute for Sustainable Manufacturing" (ISM). The proposed institute is the outgrowth of more than a decade of work by Professor I. Jawahir and his colleagues in this emerging area of great importance to industry in Kentucky and nationally. The Institute is also the successor to the Center for Manufacturing, for which I will be submitting a proposal for closure in the near future.

The ISM will serve as a leading international organization committed to the development and deployment of sustainable manufacturing technologies for products, processes and systems. Its work will lead to significantly improved manufacturing productivity, efficiency and quality through research, educational and outreach programs.

Although the proposed ISM is a new framework to support multidisciplinary collaborative work, progress in sustainable manufacturing research and development at the University of Kentucky began nearly ten years ago. Currently, funding for nine faculty lines in the College of Engineering is dedicated to ISM. Since the new institute is not an academic unit, the faculty appointments reside in three departments. In addition to the faculty members who are appointed to funded positions in manufacturing, another nine faculty members from the College of Engineering, Gatton College of Business and Economics, School of Architecture, and Department of Mathematics participate in institute activities.

I am attaching a document in which the mission, objectives, and funding of the institute are outlined in detail. I am not requesting additional funding from the University to support the creation of the institute. This proposal has been approved by the faculty in the College of Engineering. By copy of this letter, I am routing this proposal concurrently to Dr. Hollie Swanson, Senate Chair.

Sincerely, ------- (

Thomas W. Lester Dean

Attachment

Cc Dr. Grulke Dr. Jawahir Dr. Swanson



Office of the Dean College of Engineering 351 Ralph G. Anderson Building Lexington, KY 40506-0503

859 257-1687 859 257-8827 fax 859 323-4922

www.engr.uky.edu





Department of Chemical and Materials Engineering

177 Anderson Hall Lexington, KY 40506-0046 (859) 257-5507 kalika@engr.uky.edu

April 26, 2010

## **TO: University Senate Council**

## **RE:** Proposal to Establish the Institute for Sustainable Manufacturing

I am pleased to support the proposal to establish the Institute for Sustainable Manufacturing in the College of Engineering. The Institute will facilitate essential interdisciplinary research in an area of great importance to both the Commonwealth of Kentucky and the nation. Further, I anticipate that there will be numerous opportunities for productive research interactions involving faculty in the Department of Chemical and Materials Engineering that will be strengthened by the resources and facilities of the Institute.

Sincerely,

## Doug Kalíka

Douglass S. Kalika, Professor and Chair Department of Chemical and Materials Engineering



**Department of Mechanical** Engineering

151 Ralph G. Anderson Building Lexington, KY 40506-0503 Office: (859) 257-2662 Fax: (859) 257-3304 www.engr.uky.edu/me

College of Engineering Ralph G. Anderson Building Lexington, KY 40506

Subject: Letter of Support

To Whom It May Concern:

On behalf of the Department of Mechanical Engineering, I would like to add my endorsement to the proposal to establish the Institute for Sustainable Manufacturing (ISM) in the College of Engineering. I see the benefits of such an Institute in fostering interdisciplinary research in the college and with other University of Kentucky colleges. I believe our department's involvement in the Institute will be of mutual benefit.

Involvement of Mechanical Engineering faculty in ISM will be documented through use of the DOE Form and research interaction will be coordinated through the internal approval form. Faculty hiring in the area of manufacturing will be done with input from ISM faculty to ensure both units are well served.

Sincerely,

L. Scott Stephens, Ph.D., P.E. Chair and Engineering Alumni Professor



College of Engineering Department of Electrical and Compoter Engineering 453 F. Paul Anderson Tower Lexington, KY 40506-0046

859-257-8042 Jan 859-257-3092

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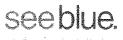
April 28, 2011

Dear Dr. Jawahir,

I endorse the proposal to establish the Institute for Sustainable Manufacturing (ISM) in the College of Engineering. I see the benefits of such an Institute in fostering interdisciplinary research in the college and with other University of Kentucky colleges. I believe our department's involvement in the Institute will be of mutual benefit.

Sincerely, Larry Holloway

Professor and Chair, Department of Electrical and Computer Engineering TVA Endowed Professor of Electrical Engineering Director, Power and Energy Institute of Kentucky (PEIK)



Proposal to Create the Institute for Sustainable Manufacturing (ISM), in the College of Engineering, University of Kentucky

Presented to:

Faculty of the College of Engineering University of Kentucky Lexington, KY 40506

By Sustainable Manufacturing Core Group College of Engineering University of Kentucky

March 2011

## I. Introduction

This proposal seeks to establish within the College of Engineering a transformed organization to be called the *Institute for Sustainable Manufacturing (ISM).*<sup>1</sup>

Established in 1986 by the Commonwealth of Kentucky as the Center for Robotics and Manufacturing Systems, the Center for Manufacturing was a unique multidisciplinary program that conducted manufacturing research, transferred manufacturing technology to industry, and supported educational efforts in manufacturing. As a result of a strategic effort by UK to move to the forefront of new technologies and workforce development for the future of manufacturing, the Center for Manufacturing, it is proposed, will be transformed into the proposed Institute for Sustainable Manufacturing (ISM).

The purpose of the ISM is to advance progress toward sustainability both nationally and internationally by focusing on manufacturing.

Specifically, in strategic areas of sustainable manufacturing, the ISM will

- conduct academic research<sup>2</sup> (basic and applied),
- invent and commercialize innovative products and processes and technologies,
- transfer knowledge to industry through extension/outreach, and
- coordinate with graduate and undergraduate educational programs offered by the College and individual departments.

## A. Sustainable Manufacturing Defined

The term "Sustainable manufacturing" is defined as *the creation of manufactured products that use processes that minimize negative environmental impacts, conserve energy and natural resources, are safe for employees, communities, and consumers and are economically sound* (U.S. Department of Commerce, 2009). That is, sustainable manufacturing refers to a manufacturing sector that is not only compatible with a sustainable society, but also a sector that plays a key role in developing the technologies so vital to attaining such a society.

<sup>1</sup> ISM is a multidisciplinary research institute and is an "educational unit" within the meaning of UK GR-VII-A having as its primary mission instruction, research and service. Instruction here refers to "research instruction" --see *Addenda*, p. 15. ISM's director will be a faculty member. DOE assigned to ISM from core faculty funded research ( a metric to be tracked annually) will total the equivalent of 1 FTE or more.

<sup>2</sup> As used in this proposal, the term <u>research</u> should be understood as academic research which inherently involves the mentoring and supervision of graduate students, visiting scholars and post-doctoral researchers as well as "research instruction." "Coordinate with graduate ...educational programs " should be understood in this context. See *Addenda* p. 15 for our proposed definition of "research instruction."

The well-respected National Council for Advanced Manufacturing (NACFAM) states that currently the term "sustainable manufacturing" is used somewhat confusingly to emphasize different parts of the entire project. For NACFAM, "Sustainable manufacturing" means both the manufacturing of products, that are designed to be used in a sustainable fashion and to the sustainable manufacturing of all products. The former emphasis includes *manufacturing of renewable energy, energy efficiency, green building, and other* "green" & social equity-related products, and the latter emphasizes the *sustainable manufacturing of all products, taking into account the full sustainability/total lifecycle* issues related to the products manufactured (NACFAM, 2009).

Thus, in the broad sense, **sustainable manufacturing addresses sustainable products**, **sustainable manufacturing processes and systems**.

## B. Why Sustainable Manufacturing as Focus?

## 1. Broad reach and importance

Manufacturing is a key focus for ISM because the myriad activities involved in designing, making and distributing products touch on so many basic aspects of the transition to sustainability - the balance and harmony between *economic, societal and environmental well-being* – such as use of natural resources, wealth creation, environmental impact, energy-efficiency, living standards, health, safety, etc.

# 2. Need for rapid development & deployment of new energy-efficient and environmentally benign technologies for products and processes

Manufacturing will also be a key player in addressing critical and urgent national and international issues on the way to attaining sustainability. For example, a recent report from the National Academy of Sciences on "America's Energy Future" speaks of the need for the U.S to obtain substantial energy-efficiency improvements, new sources of energy and reductions in greenhouse gas emissions "through the accelerated deployment of existing and emerging energy-supply and end-use technologies." Thus, while other collateral R&D efforts can tackle necessary steps such as the development of renewable energy resources, ISM's contribution to a viable energy future is to help create an advanced manufacturing sector that designs, makes and distributes (deploys) such technologies as rapidly, cheaply and efficiently as possible. Another example showing ISM's focus on manufacturing is in line with current national priorities: The Hollings Manufacturing Extension Partnership (a program created and supported by Congress) in FY 2010 will focus on 1) increasing manufacturers' adoption and application of renewable energy technologies and the development of new products, and 2) supporting energy-efficient production and reducing manufacturers' environmental impact and related costs by promoting the development of new, environmentally-focused materials, products and processes.

## C. Unique Features of the ISM

One unique feature of the ISM is that it will be designed to facilitate and support **crossdisciplinarity** (work across disciplinary boundaries), and even **inter-disciplinarity** (work that results in the creation of new hybrid disciplines). Because attaining sustainability requires a better understanding of how complex human, natural and technological systems interact, the questions raised cannot be confined within the boundaries of traditional academic disciplines. Thus effective R&D will necessarily involve crossdisciplinary research teams in which professionals in natural sciences, social sciences and humanities work in collaboration. That is, ISM's R&D will not only bring engineering expertise to tackle product design, materials, manufacturing processes and systems, but also ISM R&D must also include expertise from *business and economics, psychology, sociology, public policy, the natural sciences and other aspects of the broader economic, environmental and societal issues*. From this collaboration new hybrid disciplines and methodologies for products and processes will emerge.

The possibilities below represent a sampling of the potential collaborative research needed to understand the complex web of interactions between natural and man-made systems:

- Modeling the use of natural resources in sustainable products and processes
- Analysis of interaction between living systems and man-made systems
- Exploring technological and behavioral issues in sustainable products and processes
- Understanding the forces that determine human consumption of resources
- Studying life-cycles issues in the use of energy, materials and resources that reflect how human activities define, perturb, or limit materials/resource use flow and supply, nutrient distribution, biodiversity, and ecosystems
- Contributing to economic incentives and governmental policies for developing and deploying sustainable manufacturing technologies.

Another distinct feature to be noted is that the *focus on sustainable manufacturing* is unique. It sets the ISM apart from all existing centers or institutes devoted to sustainability issues. This niche has evolved from the patient groundwork over the last five years by the sustainable manufacturing research group within the College of Engineering.

## D. Advantages & Benefits of an ISM

The ISM will help address many of the strategic goals of the University of Kentucky, such as increasing collaborations among academic and support units and helping support interdisciplinary studies and inter-professional training. Indeed, ISM's mission and goals explicitly support UK's Strategic Plan Goals One and Two, given the recognition by industry and governments around the world of the need for more sustainable approaches to manufacturing. For example, Sustainability is becoming a "hot topic" in several National Science Foundation engineering and engineering education areas, including most recently Partnership for International Research & Education (PIRE). More sustainable approaches will demand new technologies to enable more sustainable manufacturing and thus will drive innovation. Research in sustainable manufacturing is of benefit to Kentucky companies and Kentucky economic development as well, and may help shift the state away from the outmoded strategy of attracting industry by means of low labor costs, low energy costs and tax incentives. UK's Strategic Plan Goals Three and Four are addressed through research projects to develop graduate students through research participation and to attract underrepresented groups (standard College of Engineering practice ISM will

support). ISM will also support Goal Five directly through professional development offerings and through outreach, such as the Sustainable Manufacturing Forum held on UK campus and attracting representatives from both industry and academia nationally and internationally; the 3<sup>rd</sup> annual forum is now being planned for fall 2011.

Because it would serve as a model for *cross-disciplinary and inter-disciplinary research*, the ISM would help bring talented and adventurous students and younger faculty, with relevant and unique expertise, to the University of Kentucky and would raise the university's profile for innovative approaches to R&D. Bringing faculty together from a number of different colleges and departments at the University of Kentucky will create synergies that can enable more effective research projects and the successful pursuit of large-scale cross-disciplinary funding in some of the nation's most urgent R&D priority areas such as energy-efficient and environmentally benign products and processes.

## E. Vision

The Institute for Sustainable Manufacturing (ISM) will serve as a leading international organization committed to the development and deployment of sustainable manufacturing technologies for products, processes and systems for significantly enhancing manufacturing productivity, efficiency and quality through its highly effective research and outreach aimed at developing new technology for next generation manufacturing.

## F. Mission

The mission of the Institute for Sustainable Manufacturing (ISM) is to actively pursue academic research (basic and applied) with the goal of producing new and innovative manufacturing technologies at product, process and systems levels, engaging in technology transfer/deployment and industry outreach for effective dissemination of the new knowledge generated, and coordinate with relevant educational programs offered by the College and individual departments.

## II. Focus Areas in Detail

## A. Research

### 1. Research Areas

The research focus of the ISM will include, but not limited to, the following areas:

- *Sustainable materials* (energy-efficient material design for manufacture: molecular, microstructural and metallurgical transformation of materials; self-healing materials and memory alloys)
- *Sustainable product development* (energy-efficient products; sustainability metrics for products; 6R-based product design for sustainability)
- *Sustainable manufacturing processes* (energy-efficient, environmentally benign manufacturing process development toxic-free, hazardless, safe and secure

technologies; minimal use of metal working fluids and chemicals; tribological interface science; coatings; surface and sub-surface integrity studies)

- **Sustainable manufacturing systems** (metrics for sustainability performance at enterprise levels, ontology for interoperability of sustainable supply chains; sustainable quality systems; energy-efficient supply chain operations and manufacturing systems)
- **Society, public policy and regulatory issues in sustainable manufacturing** (Societal Impact studies; legislative and administrative issues; policy implementation; product and process liability; ethics)
- *Economic analysis of sustainable products and processes* (marketing strategies and business economics for sustainable products and processes)

### 2. Research Teams

Each of these areas will include several assigned faculty (including the originally allocated faculty from the former Center for Manufacturing, and affiliate faculty<sup>3</sup> (those drawn from other collaborating academic and research units); researchers (postdoctoral and staff researchers); graduate students; undergraduate students (research trainees); and limited technical staff. In the initial phase of the ISM, technical support for research involving experimental work and student training will be provided by allocated technical staff from the former Center for Manufacturing, and new funding brought in by ISM will enable hiring additional technical staff, as needed.

### 3. Support for the M.S.M.S.E. To Change

From its inception in 1992, the Master's program in Manufacturing Systems Engineering (MSMSE) has been operated by two organizations. The program was housed administratively in the College of Engineering rather than in an engineering department because of its highly multidisciplinary nature. At the same time, the Center for Manufacturing [formerly the Center for Robotics and Manufacturing Systems] assumed responsibility to coordinate the program, provide staff and graduate student support and oversee day-to-day operations. Faculty associated with ISM can continue to conduct MFS courses but ISM as a unit will not be involved in administration or awarding of degrees.

Faculty associated with ISM would also continue to provide mentoring for students in the Boeing Fellowship in Sustainable Systems, a recently established program which provides support for graduate study in inter-disciplinary and trans-disciplinary areas of sustainable manufacturing that integrate a lean manufacturing approach with sustainability principles.

<sup>3</sup> For purposes of this proposal, assigned faculty are defined as faculty some of whose DOE is attributable to the Institute. Affiliate faculty are those whose DOE does not accrue to the Institute but who maintain involvement through collaboration in research and other Institute functions.

Information on the existing MSMSE program's courses, faculty and requirements can be found at http://www.mfg.uky.edu/ms/

## B. Technology Transfer/Innovation Management

ISM will develop a solid platform for new technology deployment and dissemination in industry and for generating additional revenues for the ISM through commercialization activities of its inventions from patents and copyrighted software. Three specific avenues are proposed:

## 1. Product and Process Innovation

Developing new and innovative technologies for products and processes and promoting the application of these technologies.

## 2. Industry/University Consortia Development and Hosting of Conferences

In selected research focus areas, industry – university consortia will be established, and seminars/forums/workshops/conferences will be organized at national and international levels. The ISM faculty and staff recently organized and hosted its 2<sup>nd</sup> International Forum on Sustainable Manufacturing, held at the Young Library Auditorium on September 17, 2010. This annual event attracted over 100 participants with about 40% of the participants from industry. It is expected to continue with this new Forum series.

Note another effective means of dissemination and outreach: the ISM's proposed director, I.S. Jawahir, is editor-in-chief of International Journal of Sustainable Manufacturing.

### 3. Product and Process Commercialization

Technical assistance for developing technology transition and commercialization plans – development of intellectual property on inventions and assistance in licensing to industry

## 4. Professional Development Programs

The ISM proposes to begin its outreach by exploring possibilities for providing noncredit extension/outreach in the form of workshops and short courses accessible to and relevant for industry professionals. These courses will serve as a venue for dissemination of ISM research and a means to develop industry research collaborations. ISM will be able to draw on the extensive experience in offering such courses by the lean manufacturing program, currently housed with Institute of Research for Technology Development (IR4TD).

### UK Collaborations

In addition to dissemination as part of their professional activities, ISM faculty are at work in developing collaborations with other UK units outside the College of Engineering. For example, ISM has been an active participant in the current activities of the Tracy Farmer Institute for Sustainability and the Environment, and recently played a major role in organizing and hosting of the university-wide Sustainability Showcase event on September 22-23 which included selection of recipients for the "Corporate Sustainability" award for two companies (one large company and a small/medium company) committed to sustainability practices in KY and the region.

## E. Faculty and Staff

Table 1 below shows a list of committed core and affiliate faculty and staff for the proposed ISM, including 11 core faculty (including two vacant positions), 10 affiliate faculty, 6 senior staff (1 technical staff, one administrative/business officer and four part-time staff). ISM is currently in discussions for developing collaborative programs with the Martin School of Public Policy and Administration and the College of Law at the University of Kentucky.

ISM technical staff will provide laboratory management and equipment maintenance for core and associate ISM faculty, as well as technical support and logistics for all institute activities including audiovisual and videoconferencing activities.

Faculty	Department, College, or Center	Core ISM Faculty	Affiliate Faculty	Area of Expertise Related to Sustainable Manufacturing
F. Badurdeen	ME			Sustainable supply chains
J. Balk	СМЕ			Materials, micro/nanostuctures
Y.T. Cheng	СМЕ			Nanostructured materials
O. W, Dillon, Jr.	ME			Manufacturing process mechanics
T. Goldsby	Coll. of B & E			Supply chain management
E. Grulke	СМЕ			Sustainable materials, emissions
L. Holloway	EE			Manufacturing system modeling
S. Ellis	Coll. of B & E			Supply chain management
I.S. Jawahir	ME			Sustainable machining processes
H. Karaca	ME			SM alloys, self-healing materials
A.T. Male	ME			Materials science and engineering
J. Parker	ME			Society and public policy
N. Puckett	Coll. of Arch.			Sustainable design & architecture
D. Puleo	CBiomedE			Sustainable biomedical implants
K. Rouch	ME			Product design and FE modeling
J. Seay	Paducah (Eng)			Biofuels, green eng., CAD
D. Sekulic	ME			Manufacturing energy modeling

**Table 1:** Current Faculty (Core and Affiliate), staff and their major areas of expertise

S. Stephens	ME		MEMS, tribology in metal working
Y. Zhang	EE		Intelligent control systems
*R. Alloo (P/T)	СоЕ		Industry liaison, IP issues, admin.
*B. Gregory (P/T)	СоЕ		Technical writing, documentation
C. Arvin	ISM		Lab mgmt., technical support
H.M. Adkins	ISM		Administrative/business support
**R. Anderson (P/T)	EE		Technical writing, documentation
***S. Woolery (P/T)	СоЕ		Website development

\* Senior staff who will work with the ISM faculty and provide administrative support

\*\* Technical staff who will work with the ISM faculty, and will provide technical support

\*\*\* College marketing staff who provide marketing and website development support

## III. The ISM Five Years Out

Financially, the goal for the ISM is to become self-sustaining as a result of achieving excellence in its research, extension, and outreach missions.

### Indicators of progress toward such a goal will include

- Growth in faculty (new hires as core ISM faculty and affiliate faculty)
- Growth in postdoctoral fellows and graduate students<sup>4</sup>
- Growth in collaborative cross-disciplinary research proposal awards
- Growth in extramural funding from government and industry (see Figure 1)
- Growth in invention disclosures and utility patents
- Growth in income from IP licensing
- Growth in SBIR/STTR awards
- Faculty recognition (awards and indications of their value from peers and professional/academic societies)
- ISM recognition as in the forefront of new developments in sustainable manufacturing through important publications, including books, journals, etc., in the field

<sup>4</sup> There is no provision for post-doctoral students to hold primary appointments in ISM; postdoctoral researchers like visiting scholars will be supported by their home institution. Graduate students and post-doctoral scholars will be recruited by faculty for their research; visiting scholars will request such status and ISM, home department and host faculty will develop a plan for the visit.

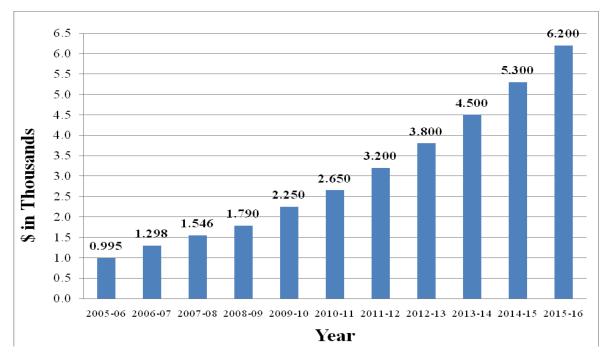


Figure 1: Past and projected extramural funding in sustainable manufacturing

Figure 1 (above) shows the funding levels during the last five years and the projected growth in extramural funding. As seen, the ISM is expected to bring in over \$6M per year by 2015-16. The funding projection includes distributed and total annual funding by the ISM faculty from federal and state agencies, foundations, industry groups and private donations including endowments. Income from research consortia and from licensing of IP and copyrighted software is also included in this projection. It is expected that UK will continue to support the current faculty and staff salaries, with a very high possibility of using the extramural funding generated by the ISM for creating new research faculty lines, postdoctoral research and staff positions, etc., in addition to graduate and undergraduate RA support for various research activities within the ISM. It is also worth noting that the current funding for AY2010-11 has already exceeded the projections.

## IV. Administration/Management and the Proposed Organizational Structure

## A. Relationship to Other Units

One key to a healthy advanced manufacturing sector is effective R&D conducted in collaboration with industry; thus, the model used by the former Center for Manufacturing - working to translate industry needs into university R&D projects -- remains one pillar of the ISM's approach. ISM will actively seek partnerships on and off campus.

To ensure good working relationships<sup>5</sup>, especially with ISM core faculty's home departments, ISM is obtaining letters of cooperation from chairs of units whose faculty are

<sup>5</sup> ISM does not propose to grant degrees or certificates (undergraduate, graduate, postdoctoral). ISM faculty will serve on graduate committees as appropriate and provide advice ISM core faculty (primarily ME, CME and ECE) approving the relationship, agreeing to share a portion of DOE<sup>6</sup> and to work together on hiring faculty whose expertise would serve the department and ISM needs as well. Note that to replace recently departed core faculty (Khraisheh and Li) two new faculty will be hired; ISM will engage with the chairs of the respective departments (ME and ECE) to collaborate on hiring candidates of benefit to both the department and the institute.

To ensure its working relationships remain healthy, ISM plans to review progress annually (probably more often at first) as a self-evaluation and this review of measureables and metrics will be joined with an annual review of relationships with co-operating units (departments, other centers) to ensure that issues like resources, DOE allocations, student support, faculty hiring and so forth are being addressed satisfactorily and to adjust these areas as needed. The university advisory committee will be asked to assist and advise here.

ISM's planning approach has been to identify key stakeholders, identify what they value that could be provided by ISM activity, identify ways to measure the successful production of those values and then prepare operational plans for action to achieve those values. In such plans, we clearly identify the specific activities that ISM members will conduct and what their expected outcome(s) will be. These give us both interim targets for appropriate metrics to establish a "trajectory" for achieving the long term goal(s) as well as a "process" for periodic review of progress and adjustment of action plans to address deviation from those trajectories.

## B. Approach

It is proposed to develop and structure the ISM as an integral unit of the College of Engineering at the University of Kentucky with close ties with all engineering departments, centers and interactions with several other academic departments, centers and institutes from other colleges in the university.

The ISM director will be appointed by the Dean of the College of Engineering using procedures in the ARs (or the appointment method for other unit/center directors).

The ISM, in its initial phase, will draw all of the nine faculty (F. Badurdeen, Y.T. Cheng, L. Holloway, M. Khraisheh (position recently vacated), I.S. Jawahir, J. Li (position recently vacated), A.T. Male, D.P. Sekulic, Y. Zhang) whose positions were created from the original

as students develop their educational and research plan with their committee. ISM faculty conducting research will supervise and evaluate the graduate students, visiting scholars and post-doctoral researchers participating in these ISM research projects according to the policies and procedures of the faculty member's home department. In cases where the research project involves faculty from several departments, the policies and procedures of the department in which the student is a degree candidate will take precedence.

<sup>6</sup> DOE from ISM core faculty will total 1 FTE equivalent or more; this metric will be tracked and reviewed annually as a key measure of ISM viability.

funding allocated to the former Center for Manufacturing, and a few selected staff from this Center to form the core group to develop its strategic plan and to expand its activities in the strategic direction. Appendix 1 shows the expanded list of proposed faculty and staff of the ISM who have been identified for this initial phase of ISM development. This list includes the core ISM faculty and the Affiliate ISM faculty.

Laboratories currently used by these faculty and staff for research and extension activities will continue to remain as a part of the core facilities and the infrastructure of the proposed ISM. Appendix 2 shows the list of these laboratories.

It is proposed to partially utilize the technical and administrative staff of the former Center for Manufacturing in the initial phase of the ISM, and it is projected that within 12 months, the ISM will have several of these staff positions filled.

## C. Proposed Organizational Structure

The proposed organizational structure of the ISM will include five functional units. Figure 2 (below) shows the proposed administrative and organizational structure of the ISM covering these five major sections.

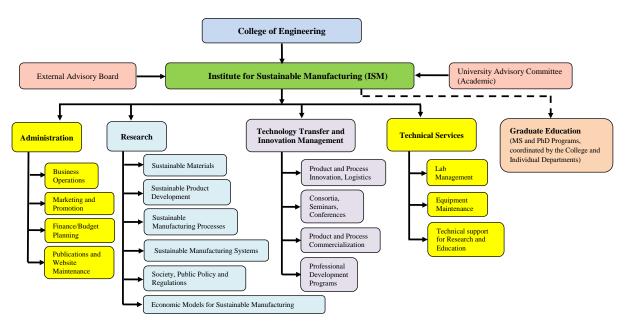


Figure 2: The proposed organizational structure of the ISM

The administrative/managerial services to be offered by the ISM to core and associate faculty will include the following major activities:

- Finance/budget planning, and management of all projects
- Marketing and promotion of all institute activities
- Publications and website maintenance

In the initial phase of the ISM, it is proposed to rely on current expertise available from staff drawn from the former Center for Manufacturing on a part-time basis. Within the first 12

months of operation, the ISM is expected to have its own full-time workforce for the above proposed activities.

## C. Location including Laboratories and Office Space

The ISM will be housed within the CRMS building. The current lab and office spaces of the ISM faculty and staff will constitute its initial location and the proposed new faculty and staff will be housed within the former Center for Manufacturing's space. The ISM will continue to seek additional space for its faculty and staff as it expands. Appendices 1 and 2 show the list of ISM faculty and staff and their current lab facilities.

## D. Proposed Industry-University Consortium Plan

The ISM will be actively seeking to establish industry-university consortia in selected areas of research. Appendix 3 shows a summary of this plan.

## E. Business and Operational Plan for ISM

The ISM core group (faculty and staff) are currently engaged in developing a QFD-based strategic business operational plan for the ISM. This plan will be available by June 30, 2011.

### Addenda

Addendum to pp. 3, 5, 7, 12 (chart ref. to "graduate education")

For purposes of this proposal, we would define "research instruction" as "providing professional education to graduate students and postdoctoral scholars (including visiting scholars) in a form that arises largely from participation in and collaboration with faculty research—in other words, experiential learning on novel research problems. Thus, RI is in addition to and distinct from the degree granting education which is provided through formal course work. RI thus has more the quality of apprenticeship and of situated learning because it is not determined in advance as in a syllabus but tends to be drawn from particular research task/program, i.e., providing a participant whatever learning is needed to complete the task at hand (which could involve theoretical study, experimental work in a laboratory or a field work (data collection) needed to turn data into publishable research. This activity always includes faculty-provided feedback on the performance of that work. RI will thus tend to be one-on-one and specific to the work at hand. However this does not preclude RI also being offered to groups of students in the form of a seminar series or workshops covering various aspects of research work and the professional career, such as, for example, providing guidance on scholarly publication and the making of successful research proposals."

### Addendum to page 7

Because of its multidisciplinary structure, ISM offers a unique kind of research instruction to graduate students and visiting scholars participating in ISM research projects. ISM RI will involve:

- (i) Faculty guided individualized instruction for graduate students, postdoctoral scholars (including visiting scholars)
- (ii) Seminars, workshops and/or short non-degree granting courses in multidisciplinary research practice and communication. These seminars would be offered by ISM core and affiliate faculty and on occasion by visiting faculty from other institutions. Students would be given credit for participation in the seminar or workshop, and for leading such workshops or seminars themselves, if practicable and useful.
- (iii) Supporting the degree granting units (Departments) in guiding graduate students through advising if fellowships/scholarships that involve multidisciplinary work are established. This advising will be facilitated through ad hoc advising committees that include core faculty of ISM and degree granting institutions selected advisors and thesis committee members (such as the BOEING Fellowship currently in effect).

### Appendix 1: List of Faculty and Staff for the Proposed ISM

### Institute Faculty:

### (a) ISM Faculty:

F. Badurdeen, Y.T. Cheng, O.W. Dillon, Jr., L. Holloway, I.S. Jawahir, A.T. Male, K.E. Rouch, D. Sekulic, Y. Zhang + 2 New Faculty to be hired in AY2010-11

### (b) ISM Affiliate Faculty:

T. Goldsby, E. Grulke, S. Ellis, H. Karaca, J. Balk, J. Parker, N. Puckett, D. Puleo, J. Seay (Paducah), L.S. Stephens

### **ISM Staff:**

C. Arvin R. Heather-Michele Adkins R. Alloo (Part-time) R. Anderson (40%) R. Gregory (33%) S. Woolery (20%)

Laboratory	Faculty/ Office	Lab Number	Space (Sq. Ft)
	(Space in Sq. ft.)		
Sustainable Machining Laboratory	I.S. Jawahir/414C (217)	009	2,820
GSO		9B	138
GSO		4140	213
GSO		413	137
		523	460
Materials Processing Laboratory	Vacant (Formerly of M. Khraisheh)/414H (200)	517	471
Metallography Lab	A.T. Male/ 4141N	012	1,014
	(200)	12A	143
GSO		511	471
Welding Research Laboratory	Y. Zhang/414P (225)	119	1,424
		115	130
GSO		117	82
GSO		119A	53
GSO		409	94
Brazing Research Laboratory	D. Sekulic/4141F	510	898
GSO	(200)	509	466
Production Systems Laboratory +	L. Holloway	414G	216
Product Development Laboratory	L. Holloway	419	785
		419A	169
Manufacturing Systems Simulation Lab	L. Holloway	414Q	223
Manufacturing Systems and Supply Chain Laboratory	F. Badurdeen/414L (200)	414K	216
Nanomechanics Research Laboratory	Y.T. Cheng	Not assigned	Not assigned
Undergraduate Manufacturing Lab	A.T. Male + All	215D	633
	Faculty	215E	609
		215F	117

Appendix 2: List of Laboratories for the Proposed ISM (includes current labs and Graduate Student Offices (GSO)

### Appendix 3: Sample Industry-University Consortium Plan

Active participation by business and industry partners will support the ISM's primary research thrust areas by providing direction on technical barriers to sustainability, by offering internships to engineering students, by helping design virtual spin-offs that will explore commercialization of ISM discoveries, by providing feedback on curricula for innovation management and sustainability engineering courses, by providing appropriate platforms for conducting research in the actual manufacturing context and by providing the opportunity for the ISM affiliated researchers to conduct validation of their findings in multiple settings.

**Facilitation.** The Institute for Sustainable Manufacturing (ISM) will be the principal facilitator for industry-ISM partnerships, technology transfer and extension. It is envisioned that the former Center for Manufacturing will be transitioned to focus on sustainable manufacturing as a unifying theme and will merge all of its activities with the ISM in the future. Through this synergistic arrangement, and with suitable ISM staff allocation, the ISM can potentially leverage well-established industry relationships that bring over 100 individual companies into the ISM's research, extension and outreach activities each year, yielding well over 200 industry projects and over 1000 industry participants in extension offerings annually, providing over \$2 million per year in external revenue.

**Sustainment of the ISM**. Demonstrating the abilities and value of the ISM research through existing industry partnerships will attract partners to ISM membership, with member firms providing cash support, in-kind contributions, equipment donations or direct-project sponsorship. The fee structure would accommodate small, medium and large firms at different annual levels: \$10,000; \$25,000; \$50,000. The membership agreement would be developed early in the establishment of the ISM through cooperation with potential industry partners, College of Engineering expertise and existing University support systems. Potential benefits to the ISM members could include technical assistance, technical support in product and process innovation, new technology development and deployment, assistance in training and professional development of company employees, pooling of resources for solving medium and long range problems and/or high risk pre-competitive research. Other benefits will be explored to make affiliation and membership in the ISM attractive to a wide variety of industry partners.

An Industrial Advisory Board for the ISM will be formed to advise on the overall direction of the research program, provide direct industry access for internships and research projects, assist in transferring technology within member firms, advise on improvements to increase value of ISM membership and attract industry partners to membership. The Industrial Advisory Board will be composed of a representative from each large (greater than 500 employees) firm in the consortium and of members from small and medium sized firms selected to maintain appropriate balance.

**Innovation.** The proposed ISM will be actively involved in translational research with small firms to commercialize product and process innovation for sustainability. Faculty will be encouraged and supported in ways to create such firms and existing state and local entrepreneurship programs will be tapped for help in locating and funding small firms

willing to participate in sustainability research and internship programs for innovation. For example, The Kentucky Science and Engineering Foundation (KSEF), which identifies innovative small firms and helps provide seed funding for product and process innovation in manufacturing and other fields, will be solicited to join the ISM's advisory board to help identify small firms and facilitate partnerships. KSEF, which operates under the aegis of the Kentucky Council on Postsecondary Education (CPE) and the Kentucky Department of Commercialization and Innovation (DCI), is ideally placed to assist in developing internship programs. So also are the Kentucky network of ICCs (Innovation Commercialization Centers) and SBDCs (Small Business Development Centers), housed at UK and in several other regions of the state. Lastly, UK's technology incubator, the Advanced Science and Technology Commercialization Center (ASTeCC), will collaborate in ISM multidisciplinary research, technology transfer, and new business startups. ASTeCC is a combination faculty research facility and commercialization center that promotes collaborative research and commercial development of discoveries made by research faculty, staff and students. In this way, a culture of discovery and innovation will develop symbiotic relationships among the ISM researchers, small innovative firms, and larger industrial and practitioner partners.

Technology Transfer. In addition to overall technology transfer facilitation through the Center for Manufacturing, the ISM can also draw on help from UK centers such as the Center for Aluminum Technology (CAT), which coordinates research efforts with the aluminum industry. Considering the energy intensive nature of aluminum processing and manufacture, and the increasing utilization of aluminum, this center will provide valuable access to an existing set of industry members and synergies. The Center for Applied Energy Research (CAER), which conducts research into energy efficiency and alternate energy sources, will serve as a channel for technology transfer to existing and emerging energy producers and manufacturers of energy production processes. The Institute of Research for Technology Development (IR4TD), founded by a \$1 million endowment from Toyota Motor Corporation and a matching \$1 million from the Commonwealth of Kentucky, focuses on the development of breakthrough technologies for the automotive and other durable goods manufacturing industries; this institute engages with industrial partners for rapid deployment of new technologies into manufacturing and will serve as another important channel for transfer of the discoveries and developments of the proposed ISM. The Sloan Center for a Sustainable Aluminum Industry focuses on areas such as recycling and supply chain development which are relevant to the proposed ISM's research. Sloan Center Partners include major companies such as ARCO, Aleris, Century Aluminum and Logan Aluminum. The ISM will also actively seek to support development of manufacturing technologies for next generation energy storage devices by close collaboration with the recently announced National Center for Battery Manufacturing Research, a collaboration of Argonne National Laboratory, University of Kentucky and University of Louisville to be located near the University of Kentucky campus.

## Appendix 4: Bios of Key ISM Faculty

### Fazleena Badurdeen

Department of Mechanical Engineering and Center for Manufacturing 414L CRMS Building, University of Kentucky, Lexington, KY 40506 Phone: (859) 323-3252, E-mail: <u>badurdeen@engr.uky.edu</u>, Fax: (859) 257-1071

#### **EDUCATION**

Ohio University, Athens, OH	Integrated Engineering	Ph.D.	2005
Ohio University, Athens, OH	Industrial Engineering	MS	2002
Postgraduate Institute of Management, Sri Lanka	<b>Business Administration</b>	MBA	2000
University of Peradeniya, Sri Lanka	Engineering	B.Sc.	1995

#### APPOINTMENTS

2005 - present	Assistant Professor, Department of Mechanical Engineering and Center for
	Manufacturing, University of Kentucky, KY
Spring	Instructor, Department of Industrial and Manufacturing Systems Engineering, Ohio
2002/Winter, Fall	University, Athens, OH
2003	
Summers 2001 -	Graduate Research Assistant, Human Factors and Ergonomics Laboratory, Ohio
2004	Research Institute for Transportation and the Environment, Ohio University, Athens, OH
2004 - 2005	Graduate Research Assistant, Department of Industrial and Manufacturing Systems
	Engineering, Ohio University, Athens, OH
1998-1999	Visiting Lecturer, Department of Science, University of Peradeniya, Sri Lanka
1997 - 2000	Lecturer, Department of Production Engineering, University of Peradeniya, Sri Lanka

#### PUBLICATIONS (five most closely related)

- **F. Badurdeen**, T.J. Goldsby, D. Iyengar and I.S. Jawahir, Transforming Supply Chains to Create Sustainable Value for All Stakeholders, in <u>Sustainability Science and Engineering</u>, I.S. Jawahir and S. Sikdar (eds.), Vol. I, In Press.
- **F. Badurdeen** and J.P. Liyanage, "Sustainable Value Co-creation through Mass Customization: A Framework", *International Journal of Sustainable Manufacturing*, In Press.
- Jayal, A.D., **F. Badurdeen** and I.S. Jawahir, "Sustainable Manufacturing: Modeling and Optimization Challenges at the Product, Process and System Levels", *CIRP J. Manufacturing Science and Technology*, Elsevier Publishers, Vol. 2(3), 2010, pp. 144-152.
- **F. Badurdeen**, T.J. Goldsby, D. Iyengar, H. Metta, S. Gupta, and I.S. Jawahir, Extending Total Lifecycle Thinking to Sustainable Supply Chains, *International Journal of Product Lifecycle Management*, Vol. 4(1-3), 2009, pp. 49-67.
- J.P. Liyanage, F. Badurdeen and Ratnayake, R.M.C., Industrial asset maintenance and sustainability performance: Economical, Environmental and Societal Implications, *in <u>Handbook on Maintenance</u> <u>Engineering and Management</u>, Ben-Daya, M., Duffuaa, S.O. Raouf, A., Knezevic, J. and Ait-Kadi, D.(<i>eds.*),Springer Publishing, pp. 665-694.

#### CURRENT RESEARCH AREAS

Modeling and Optimization of Sustainable manufacturing systems and Sustainable Supply Chains; Metrics development for Sustainable Supply Chains.

#### INTERNATIONAL RESEARCH COLLABORATORS

Prof. Jayantha Liyanage (University of Stavanger, Norway)

#### **GRADUATE STUDENTS: 8 MS**

- Graduated: 1 PhD, 8 MS (Thesis) and 6 MS (Project) students
- Current: 3 PhD candidates and 6 MS students

**RESEARCH FUNDING (2005-2010):** Received \$439,007 funding as PI and, collaborated as Co-PI in projects that received research funding more than \$ 2 M.

### Yang-Tse Cheng

 F. Paul Anderson Tower, Room 179, Department of Chemical and Materials Engineering University of Kentucky, Lexington, KY 40506-0046
 Phone: 859-323-4191 E-mail: ycheng@engr.uky.edu
 Fax: 859-323-1929

#### **EDUCATION**

Caltech	PhD	1987	Applied Physics
Caltech	MS	1983	Applied Physics
Caltech	BS	1982	Physics/Mathematics

#### APPOINTMENTS

August 2008 – present: Professor of Materials Engineering, Dept. of Chemical and Materials Engineering, University of Kentucky, Lexington, KY

Feb. 1987 – July 2008: Senior Research Scientist (1987-1992), Staff Research Scientist (1992-2001), Senior Staff Research Scientist (2001-2004), GM Technical Fellow (2004-2006), Laboratory Group Manager, Engineered Surfaces and Tribology (1999-2003), Laboratory Group Manager, Engineered Surfaces and Functional Materials (2003-2006), GM R&D Center, Warren, MI

#### FIVE MOST CLOSELY RELATED RECENT PUBLICATIONS

#### (from a list of over 130 papers and 35 U.S. Patents)

- J.M. Dasch, C.C. Ang, C.A. Wong, R.A. Waldo, D. Chester, Y.-T. Cheng, B.R. Powell, A.M. Weiner, and E. Konca, "The effect of free-machining elements on dry machining of B319 aluminum alloy," J. Mater. Proc. Tech. 209, 4638 (2009).
- [2] **Y.-T. Cheng** and M. W. Verbrugge, "Evolution of stress within a spherical insertion electrode particle under potentiostatic and galvanostatic operation," J. Power Sources 190, 453 (2009).
- [3] Y.-T. Cheng and F.Q. Yang, "Obtaining shear relaxation modulus and creep compliance of linear viscoelastic materials from instrumented indentation using axisymmetric indenters of power-law profiles, J. Materials Research 24, 3013 (2009).
- [4] **Y.-T. Cheng** and D. S. Grummon "Indentation in shape memory alloys," in Micro and Nano Mechanical Testing of Materials and Devices, edited by Fuqian Yang and James C. M. Li, Springer 2008, pp.71-86.
- [5] Y.-L. Chen, T. A. Perry, **Y.-T. Cheng**, and A.M. Weiner, "Friction stir processing for surface properties," US patent 7,225,969 (June 5, 2007).

#### SYNERGISTIC ACTIVITIES

- *Principal Editor*, Journal of Materials Research (2001-).
- Co-Chairperson, 2005 Materials Research Society Fall Meeting
- Volume Organizer, MRS Bulletin (2006-1008)
- Delivered more than 100 *invited presentations* at international conferences and university seminars

#### **RESEARCH AREAS**

Nano- and micro-meter scale properties of materials and their applications: nanoindentation modeling and measurements of mechanical properties; growth, structure, and properties of nanostructured materials (e.g., amorphous materials, nano-composites, epitaxial single crystals, single crystal nanowires); microscopic shape memory and superelastic effects; magnetorheological fluids; superhydrophobic and superhydrophilic surfaces; ion-solid interactions and ion beam modification of materials; automotive applications of new materials and processes, including electrical contacts, hydrogen sensors, metal hydride batteries, lithium batteries, fuel cells, high power-density engines and transmissions, and environmentally friendly machining processes.

#### INTERNATIONAL RESEARCH COLLABORATORS (past 48 months)

GM: M. W. Verbrugge, S. J. Harris, A. Timmons, X. Xiao, Y. Qi, T. Xie; Mich. State Univ: D.S. Grummon, X. Fei; Inst. of Mechanics (Beijing, China): C.-M. Cheng; UK: F.Q. Yang, C. Trinkle, H. E. Karaca, Z. Hilt, A. Dosier

#### GRADUATE STUDENTS AND SUMMER INTERNS SUPERVISED

W.Y. Ni, Y.J. Zhang, E. Konca, Y. Qi, Y. Li, M. Karmarkar, J. Yang, G. Auner, L. Loewenau (undergraduate), I. Hoffmann (undergraduate), N. Kishor (undergraduate, political science major), A. Carter (high school student)

**RESEARCH FUNDING:** Received \$1,102,105 funding as PI

#### Oscar W. Dillon, Jr.

#### Professor Emeritus University of Kentucky

#### **EDUCATION**

Columbia University	D.Eng. Sc.	1959	Engineering Mechanics
Columbia University	MS	1955	<b>Engineering Mechanics</b>
University of Cincinnati	BS	1951	Aerospace Engineering

#### **APPOINTMENTS**

1997 – present:	Professor Emeritus, Mechanical Engineering, post retirement appointment (part- time) at
	the UK Center for Manufacturing, University of Kentucky
2001 – 2002:	Solid Mechanics Program Director, IPA assignment, NSF
1967 – 1997:	Professor, Engineering Mechanics Department, University of Kentucky
1993 – 1996:	Interim CMS Div. Director and Solid Mechanics Program Director, IPA assignment, NSF
1988 – 1990:	Solid Mechanics Program Director, IPA assignment, NSF
1967-72, 1984-89, 1990:	Dept. Chair, Engineering Mechanics Department, University of Kentucky
1965 – 1967:	Associate Professor, Engineering Mechanics Department, University of Kentucky
1963 – 1965:	Lecturer, Mechanical and Aerospace Department, Princeton University
1959 – 1963:	Assistant Professor, Johns Hopkins University

#### **RESEARCH AREA**

Thermoplastic effects in solids; connection between metallurgical effects and stress analysis; FEM of machining

#### AWARDS

- Outstanding Contribution to Research, ASEE (Southeastern Section), 1966.
- Several local teaching and research awards.
- 2007 ASME Applied Mechanics Division Award for a lifetime of research in thermal effects in solids.

#### FIVE MOST CLOSELY RELATED PUBLICATIONS (From approx. 100 in journal and conf. papers)

- [1] Umbrello, D., A.D. Jayal, **O.W. Dillon, Jr.,** and I.S. Jawahir, "Modeling of White and Dark Layer Formation in Hard Machining", *J. Machining Science and Technology*, Vol. 14(1), 2010, pp. 128-147.
- [2] Pu, Z., O.W. Dillon, Jr., I.S. Jawahir and D.A. Puleo, "Microstructural Changes of AZ31 Magnesium Alloys induced by Cryogenic Machining and its Influence on Corrosion Resistance in Simulated Body Fluid for Biomedical Applications", *Proceedings of the 2010 ASME International Manufacturing Science and Engineering Conference*, October 12-15, 2010, Erie, Pennsylvania, USA.
- [3] Jayal, A.D., D. Umbrello, O.W. Dillon, Jr., and I.S. Jawahir, "An Investigation of the Effects of Cutting Conditions, Tool geometry and Workpiece Hardness on Surface Integrity in Orthogonal Machining of AISI 52100 Steel, *Trans. NAMRI*, May 2010, Vol. 38, pp. 57-64.
- [4] Pu, Z., Puleo, D.A., Dillon, O.W. Jr. and Jawahir, I.S., Controlling the biodegradation rate of magnesium-based implants through surface nanocrystallization induced by cryogenic machining, Proceeding of Magnesium Technology 2010, TMS Annual Meeting. Seattle, WA. February 14-18, 2010.
- [5] M'Saoubi, R., J.C. Outeiro, H. Chandrasekaran, O.W. Dillon, Jr., and I.S. Jawahir, "A Review of Surface Integrity in Machining and Its Impact on Functional Performance and Life of Machined Products", *Int. J. Sustainable Manufacturing*, Vol. 1(1-2), 2008, pp. 203-136.

**GRANTS AND CONTRACTS:** Received significant funding from AFOSR, NASA, USAF, NSF-IPA Contracts, NSF Grant, NSF EPSCoR, etc.

#### **RESEARCH COLLABORATORS**

Prof. J.C. Outeiro (Portuguese Catholic University, Lisbon, Portugal), Prof. G. Poulachon (ENSAM, Cluny, France), Prof. Dr. R. M'Saoubi (Seco Tools, Sweden), Prof. D. Umbrello (University of Calabria, Calabria, Italy).

#### **GRADUATE STUDENTS: Total of 20 MS graduates, 10 PhD graduates**

Currently co-advising 5 PhD Students with Prof. I.S. Jawahir and Prof. D. Puleo

#### Lawrence E. Holloway

TVA Professor of Electrical and Computer Engineering, and Chair, Department of Electrical and Computer Engineering University of Kentucky Lexington, Kentucky, KY40506 E-mail: holloway@engr.uky.edu

#### **EDUCATION**

Southern Methodist University, Dallas: **B.S.** in Electrical Engineering, magna cum laude, May 1987. Minors in Math and Business.

Carnegie Mellon University, Pittsburgh: **M.S.** in Electrical and Computer Engineering, Oct. 1988. Carnegie Mellon University, Pittsburgh: **Ph.D.** in Electrical and Computer Engineering: July 1991.

#### **EMPLOYMENT** (abbreviated)

University of Kentucky, Chair, Dept. of Electrical and Computer Engineering, July 2007-present

University of Kentucky, Director, U.K. Center for Manufacturing, a center for manufacturing research, teaching, and industrial extension. Sept.2002 to present. (Deputy Director 1999 to 2002)

University of Kentucky, Professor (formerly Assoc. Prof and Assist. Prof.). Aug. 1991 to present.

Joint faculty member in Center for Manufacturing and Department of Electrical and Computer Engineering.

Rockwell Science Center, Thousand Oaks, California. June 93 to August 93, July 95 Developed methods for automated fault monitoring in automated mfg. systems.

National Instruments, Austin, Texas. June 87 to August 87.

Developed application software for Macintosh II circuit boards.

LTV Aerospace and Defense, Dallas, Texas. My 1983-June 1986. Co-op student. Assignments included Avionics support, development of hardware and software.

#### **RESEARCH AREAS**

Systems, including: embedded systems, discrete event control systems; fault monitoring, detection, and diagnosis; manufacturing systems including production control and manufacturing automation.

#### MAJOR RECENT PUBLICATIONS

"Detection of unmodeled anomalous behaviors via localized controllers for condition systems"; Ashley, J, and and Holloway, L.E.; *International Journal of Production Research*; (A Special Issue on *Computation Engineering in Systems Applications*). Volume 46; Issue 19; pages 5289-5312; 2008.

"Design for Sustainability (DFS): New Challenges in Developing and Implementing a Curriculum for Next Generation Design and Manufacturing Engineers," Jawahir, I.S.; Rouch, K.E.; Dillon, O.W.; Holloway, L.; Hall, A. *International Journal of Engineering Education*, Volume 23, Number 6, November 2007, pp. 1053-1064(12)

"Applying Automated Control Synthesis Methods to Condition Systems Requiring State Observers", L.E. Holloway, J. Ashley, Y. Gong. *Control Engineering Practice*, volume 14:10 (2006), pp 1169-1181.

"Determining the right-hand vectors of an irredundant linear inequality system," Ramprasad Potluri and L. E. Holloway. *Operations Research Letters (Elsevier publishers)* vol.24 (2006), pp 373-381.

#### CURRENT RESEARCH FUNDING: Received \$3.4M funding as PI

### I. S. Jawahir

414C, Center for Manufacturing, and Department of Mechanical Engineering University of Kentucky, Lexington, KY 40506-0108. Phone: 859-323-3239 E-mail: jawahir@engr.uky.edu Fax: 859-257-1071

#### **EDUCATION**

University of New South Wales, Sydney, Australia.	PhD	1986	Manufacturing Engineering
P. F. University, Moscow, U.S.S.R.	MS	1975	Mechanical/Manufacturing Engineering

#### **APPOINTMENTS**

July 2002 – present:	James F. Hardymon Chair in Manufacturing Systems,
	Department of Mechanical Engineering, University of Kentucky, Lexington, KY
July 1996 – present:	Professor, Mechanical Engineering (Tenured), University of Kentucky, Lexington, KY
July 1990 – June 1996:	Associate Professor, Mechanical Engineering, University of Kentucky, Lexington, KY
Sept. 1989 – June 1990:	Manager, Carbide Product Design, Carboloy Inc., Warren, MI
July 1986 – Sept. 1989:	Lecturer and Senior Lecturer, Dept of Mech. Eng, Univ. of Wollongong, Australia

#### FIVE MOST CLOSELY RELATED RECENT PUBLICATIONS

#### (from a list of over 230 papers and 4 U.S. Patents, including 94 refereed journal papers)

- [1] Pusavec, F., H. Hamdi, J. Kopac and I.S. Jawahir, "Surface Integrity in Cryogenic Machining of Nickel-based Alloy – Inconel 718, J. Materials Processing Technology, Vol. 211, 2011, pp. 773-783.
- [2] Outeiro, J.C., J.C. Pina, O.W. Dillon, Jr., and I.S. Jawahir, "Size Effects and Surface Integrity in Machining
- and their Influence on Product Sustainability", *Int. J. Sustainable Manufacturing*, Vol. 2(1), 2010, pp. 112-126.
  [3] Jayal, A.D., F. Badurdeen and **I.S. Jawahir**, "Sustainable Manufacturing: Modeling and Optimization Challenges at the Product, Process and System Levels", CIRP J. Mfg. Sci. & Tech., Vol. 2(3), 2010, pp. 144-152.
- [4] Badurdeen, F., T.J. Goldsby, D. Ivengar, H. Metta, S. Gupta, and I.S. Jawahir, "Extending Total Lifecycle Thinking to Sustainable Supply Chains", Int. J. Product Lifecycle Management, Vol. 4(1-3), 2009, pp. 49-67.
- [5] Niranjali de Silva, I.S. Jawahir, O.W. Dillon, Jr and M. Russell, "A New Comprehensive Methodology for the Evaluation of Product Sustainability at the Design and Development Stage of Consumer Electronic Products", Int. J. Sustainable Manufacturing, Vol. 1(3), 2009, pp. 251-264.

#### SYNERGISTIC ACTIVITIES

- Technical Editor and Co-Founder, Journal of Machining Science and Technology, Taylor & Francis Publishers, Philadelphia, PA, (1998 - to date).
- Founding Editor-in-Chief, International Journal of Product Design and Manufacture for Sustainability, . Inderscience Publishers, United Kingdom, (2008 - to date).
- Chairman, ASME-BRTD Research Committee on "Sustainable Products and Processes" (2005-10). •
- Chairman. CIRP International Working Group on "Surface Integrity and Functional Performance of Components", CIRP, Paris, France (2008-11).
- Founder, CIRP Annual International Conference Series on Modeling of Machining Operations (1998). The 13<sup>th</sup> conference in this series will be held in Sintra, Portugal in May 2011.
- Delivered 24 Keynote Papers at international conferences, and 38 Invited Presentations in 25 countries.

#### **CURRENT RESEARCH AREAS**

Sustainable product design; Modeling and optimization of sustainable manufacturing processes: dry, near-dry and cryogenic machining; Metrics and metrology development for sustainable manufacturing.

#### INTERNATIONAL RESEARCH COLLABORATORS

Prof. D.K. Aspinwall (University of Birmingham, United Kingdom), Prof. E. Brinksmeier and Prof. F. Vollertsen (University of Bremen, Germany), Prof. M. Dassisti (Bari Polytechnic, Italy), Prof. J. Kopac (University of Ljubljana, Slovenia), Prof. J.C. Outeiro (Portuguese Catholic University, Portugal), Prof. G. Poulachon (ENSAM, Cluny, France), Prof. R. Teti (University of Naples, Italy), Dr. R. M'Saoubi (Seco Tools, Sweden), Prof. D. Umbrello (University of Calabria, Italy).

#### GRADUATE STUDENTS: 54 MS and 24 PhD Students (Current Graduate Students: 12 PhD candidates and 4 MS students; and PhD Graduates during the Last Twelve Years: 10)

#### **POSTDOCTORAL RESEARCHERS SUPERVISED (1990-to date):** 12

**RESEARCH FUNDING (1990-10):** As PI, received over \$10M in research funding from various funding agencies and industry groups. Also, collaborated as Co-PI with other colleagues in receiving over \$3M additional funding.

#### Keith E. Rouch

#### Professor of Mechanical Engineering University of Kentucky, Lexington, KY 40506-0108 Phone: 859-218-0637 Fax: 859-257-3304 E-mail: rouch@engr.uky.edu

#### **EDUCATION**

Marquette University, Milwaukee, WI PhD	1977	Electrical (Systems) Engineering
Purdue University, West Lafayette, IN MS	1967	Agricultural Engineering
Purdue University, West Lafayette, IN BS	1965	Agricultural Engineering

#### **APPOINTMENTS**

1997 – 2009:	Chair of Department of Mechanical Engineering, University of Kentucky, Lexington, KY.
1993 – present:	Professor of Mechanical Engineering, Lexington, KY.
1996 - 1996	Interim Director, Center for Robotics and Manuf. Systems, University of Kentucky.
1985 – 1993:	Associate Professor of Mechanical Engineering, Univ. of Kentucky, Lexington, KY.
1966 – 1985:	Allis-Chalmers Corporation, Milwaukee, WI (various,(including Technical Group Leader)

#### **PROFESSIONAL AFFILIATIONS**

Fellow of American Society of Mechanical Engineers Registered Professional Engineer, Kentucky, 1992 to present (PE # 17403) Registered Professional Engineer, Wisconsin, 1971 to present (E-12298) Member, American Society of Engineering Education Member, Society of Tribologists and Lubrication Engineers

#### **Five Most Significant Recent Papers**

- Hamade, R.H., S.P. Manthri, F. Pusavec, K.A. Zacny, L.A. Taylor, O.W. Dillon, Jr., K.E. Rouch and I.S. Jawahir, "Compact Core Drilling in Basalt Rock using Rectangular PCD Tool Inserts: Wear Characteristics and Cutting Forces", J. Materials Processing Technology, Vol. 210, 2010, pp. 1326-1339.
- [2] Hamade, R.H., S.P. Manthri, F. Pusavec, K.A. Zacny, L.A. Taylor, K.E. Rouch, O.W. Dillon, Jr., and I.S. Jawahir, "Developing a Methodology towards Sustainable PCD Compact Core Drilling on Planet Mars", 2009 ASME-IMECE, Orlando, FL, November 2009.
- [3] Jawahir, I.S., **K.E. Rouch**, O.W. Dillon, Jr., L. Holloway and A. Hall, "Design for Sustainability (DFS): New Challenges in Developing and Implementing a Curriculum for Next Generation Design and Manufacturing Engineers", *Int. J. Engineering Education*, Vol. 23(6), 2007, pp. 1053-1064. [1]
- [4] "Transitioning To a Two-Semester Capstone Design Sequence in Mechanical Engineering", **Keith E. Rouch**, William E. Murphy, Vincent R. Capece, 2007 Capstone Design Conference, June 2007.
- [5] "Multi-University and Industrial Collaboration for Research-Oriented Capstone Experience", Suzanne Weaver Smith, **Keith E. Rouch**, William T. Smith, Jamey D. Jacob, 2007 Capstone Design Conference, June 2007.

#### **RECENT PATENTS (total of five)**

Rouch, K.E., Tewani, S., Walcott, B., Massa, T., Stephenson, R.W., Stephens, S. (1992), Active Vibration Control Device, United States Patent 5,170,103, December 8, 1992. (also foreign patents applied for in Australia, Canada, Japan, South Korea, EPC [Germany, Great Britain, France, Italy, Sweden, and Belgium]

Ball, J.H., Sheth, P.N., and Rouch, K.E. (1986), Damped Dynamic Vibration Absorber, United States Patent 4,583,912.

#### **Dusan P. Sekulic**

414F CRMS Building, Department of Mechanical Engineering University of Kentucky, Lexington, KY 40506-0108
Phone: 859-257-2972 E-mail: <u>sekulicd@engr.uky.edu</u> Fax: 859-257-1071

#### **Professional Preparation**

University of Novi Sad, Yugoslavia	Mechanical Engineering	B.Eng.	1972
University of Novi Sad, Yugoslavia	Physics	B.Sci.	1976
University of Belgrade, Yugoslavia	Mechanical Engineering	M.S.	1978
University of Belgrade, Yugoslavia	Mechanical Engineering	D.Sc.	1981

#### Appointments

2006 - Present	Full Professor (tenured), Department of Mechanical Engineering, U of Kentucky
2000 - 2006	Adjunct Professor, College of Engineering, UK, Lexington, Kentucky,
1997 - 2000	Senior Research Scientist, CRMS, College of Engineering, UK, Lexington, Kentucky
1996 - 1997	Visiting Professor, Department of Mechanical Engineering, UK, Lexington, Kentucky
1994 - 1996	Visiting Professor, Marquette University, Milwaukee, Wisconsin
1993 - 1995	Full Professor (tenured), University of Novi Sad, Yugoslavia
1993 – 1994	Visiting Research Professor, University of Tennessee, Knoxville
1988 – 1993	Associate Professor with tenure, University of Novi Sad, Yugoslavia
1989	Visiting Scholar, Massachusetts Institute of Technology, Cambridge, Massachusetts
1988 – 1989	Senior Fulbright Scholar, Duke University, Durham
1977 – 1987	Assistant professor and subsequently Docent, University of Novi Sad, Yugoslavia
1977	Visiting Researcher (DAAD), Technical University Munich, LATUM, Germany
1973 – 1977	Research Fellow, College of Engineering, University of Novi Sad, Yugoslavia

#### Publications: (total more than 150; SCI >400) Books:

- R.K. Shah and D.P. Sekulic (2003) Fundamentals of Heat Exchanger Design, Wiley, Hoboken.
- B. Bakshi, T. Gutovski and D.P. Sekulic (2010) Thermodynamics and the Destruction of Resources, Cambridge University Press, Cambridge, UK.
- Shah, R.K. and Sekulic, D.P. (2010) Fundamentals of Heat Exchanger Design, *China Machine Press*, Beijing, 2010. ISBN 978-7-111-28881-7 (translated by Cheng Lin into Mandarin)
- Sekulic, D.P. (2011) Advances in Brazing: Science, Technology and Applications, *Woodhead Publ.*, Cambridge, UK. 2011. ISBN to be published (July 2011).
- Sekulic, D.P. (Editor) Handbook of Heat Exchanger Design, Vol. 2, Begell House, 2011 (to appear)

#### Articles (only the last ten months):

- D.P. Sekulic (2010) Wetting and Spreading of Liquid Metals Through open Micro Grooves and Surface Alterations, *Heat Transfer Engineering*, Hard Copy 2011, Vol. 32, Issues 7 & 8, pp. 1-11
- M. Chen, Yuanning, J., Sekulic, D.P., Zhao, H. (2010) Wetting Kinetics of SiC nanoparticle reinforced Sn-Pb eutiectic solders, *China Welding*, Vol. 19, No. 3, pp. 16-20.
- D. Busbaher, W. Liu, and D.P. Sekulic, (2010) High Temperature Brazing of Mo/Mo-Re with a nano-composite Mo-Ni filler, *DVS Berichte*, Vol. 263, 2010, pp. 211-214

**Synergistic Activities:** Dr. Sekulic is a Fellow of ASME. Prof. Sekulic is the Director of Graduate Studies of the Manufacturing Systems Engineering program and a Consulting Professor at the Harbin Institute of Technology. Reviewer of: (i) more than 30 international technical journals, (ii) NSF, NSERC, AAAS, Royal Soc., USCRDF, and various other researches funding organization Review Panels, and (iii) member of multiple advisory boards of research journals.

**Postdoctoral and Graduate Students**: Dr. Hui Zhao, Dr. Gao Feng, Dr. Chunxu Pan, Dr. Philip Hadinata, Dr. Maoai Chen, Dr. Michael Krivelyev (Fulbright), Dr. Li Yulong (CIS), Dr. Wang Hongqin, S. Jayasankar, N. Dinesh, V.S. Boddapati, A. Renduchintala, N. Narayanaswamy, D. Busbaher, S. Sunramanian, L. Wen, Cheng Nien-Yu, Schwindell, Michael.

### YuMing Zhang

#### Department of Electrical and Computer Engineering University of Kentucky, Lexington, Kentucky 40506 Phone: 859-323-3262 E-mail: YMZhang@uky.edu Fax: 859-257-1071

#### EDUCATION:

- Ph.D., 1990, Harbin Institute of Technology (HIT), National Key Laboratory for Advanced Welding Production Technology (NKLAWPT), Harbin, China.
- M. S., 1984, HIT, Department of Control Engineering, Harbin, China.
- B. S. 1981, HIT, Department of Control Engineering, Harbin, China.

#### **EMPLOYMENT:**

University of Kentucky

- Department of Electrical and Computer Engineering: Professor-July 2005-present, Associate Professor-August 1998-June 2005
- Center for Robotics and Manufacturing Systems: Visiting Scholar-Feb. 1991-July 1998 Harbin Institute of Technology, Harbin, China
- NKLAWPT, HIT, Harbin, China Associate Professor-December 1990-Feb 1991, Lecturer-Sept. 1998-Nov. 1990, Junior Lecturer- Sept. 1984-August 1986

#### HONORS AND AWARDS:

- American Welding Society (AWS), Fellow, 2009
- James R. Boyd Professor in Electrical Engineering (7/03-present)
- Adams Memorial Membership Award, American Welding Society, 2005.
- Best Poster Paper Prize, The 15th Triennial IFAC World Congress, The International Federation of Automatic Control (IFAC), July 2002
- The A. F. Davis Silver Medal Award for Machine Design, American Welding Society, 2011, 2009, 2001
- The Donald Julius Groen Prize, The Institution of Mechanical Engineers, United Kingdom, 1995

#### SYNERGISTIC ACTIVITIES:

- Lead Principal Reviewer, Welding Journal, since 2007
- Principal Reviewer, Welding Journal, since 2001
- Associate Editor, International Journal of Identification, Modelling and Control, since 2007
- Member of Editorial Board, International Journal of Science and Technology of Welding and Joining, 2010

#### FIVE SELECTED PUBLICATIONS:

- Z.Z. Wang and Y.M. Zhang, "Brightness based selection and edge detection based enhancement separation algorithm for low resolution metal transfer images," IEEE Transactions on Automation Science and Engineering, 6(1): 181-187, 2009.
- Kehai Li and Y.M Zhang, "Consumable Double-Electrode GMAW Part II: Monitoring, Modeling, and Control," Welding Journal, 87(2): 44s-50s, 2008.
- H.S. Song, Y.M. Zhang, "Three-dimensional Reconstruction of Specular Surface for Gas Tungsten Arc Weld Pool," Measurement Science & Technology, 18: 3751-3767, 2007.
- K.H. Li and Y.M. Zhang, "Metal transfer in double-electrode gas metal arc welding," ASME Journal of Manufacturing Science and Engineering, 129(6): 991-999, 2007.
- Y.M. Zhang and Y.C. Liu, "Control of dynamic keyhole process," Automatica, 43(5): 876-884, 2007.

#### PhD GRADUATED: 13

Joseph Istre, Yuchi Liu, Wei Lu, Ming Jing (A.Y.Male, Y.M Zhang), Brenton Losch, Gohar Saeed, Ge Wang (G. Huang, Y.M Zhang), Kehai Li, Kun Qian, Hongsheng Song, Zhenzhou Wang, Xiaodong Na (B.L. Walcott, Y.M Zhang), Xiaopei Liu, Xiangrong Li (Y,M Zhang, L. Holloway)

**CURRENT RESEARCH AREAS**: innovative welding processes; monitoring and control of welding processes; next generation welding machines.

SUMMARY: 115 Referred Journal Papers, 5 US Patents, 40 Scholars and Students, PI for 7 NSF Grants.

## Graduate Certificate in International Education Course of Study & Regional Competency Proposal

Name	SSN or Student ID / _ /
Graduate Program	
Graduate Advisor	
Date of Application	
Professional Goal	
Proposed Course Work (15 hrs)	

- EPE 555 Comparative Education (3 hrs)
- EPE 632 Student Services (3 hrs)
- EPE 676 Organization & Administration in Higher Education (3 Hrs)
- Elective\_\_\_\_\_
- Elective\_\_\_\_\_

#### **Professional Preparation:**

<u>Statement of Language Proficiency</u> (To what extent are you prepared to meet the minimum language requirements\* of your professional and regional concentration?):

\*Please attach any evidence of language competency testing results if appropriate.

<u>Statement of Professional Competency</u> (In what ways are you particularly prepared to meet the professional requirements\* of an international education position?):

\* Please attach description of your international living, study, and/or working experiences and evidence of your skills such as artifacts of these as appropriate,