

RECEIVED

OCT 26 2015

Course Information

Date Submitted: 10/22/2015

Current Prefix and Number: MFS - Mfg Systems Engineering , MFS 605 SYSTEMS FACTORY INFO & CONTROL

OFFICE OF THE
SENATE COUNCIL

Other Course:

Proposed Prefix and Number: MFS 605

What type of change is being proposed?

Major – Add Distance Learning

Should this course be a UK Core Course? No

1. General Information

a. Submitted by the College of: ENGINEERING

b. Department/Division: Engineering

c. Is there a change in 'ownership' of the course? No

If YES, what college/department will offer the course instead: Select...

e. Contact Person

Name: Dr. Wei Li

Email: wei.mike.li@uky.edu

Phone: 859-257-4842

Responsible Faculty ID (if different from Contact)

Name: Dr. Wei Li

Email: wei.mike.li@uky.edu

Phone: 859-257-4842

f. Requested Effective Date

Semester Following Approval: No OR Effective Semester: Fall 2015

2. Designation and Description of Proposed Course

a. Current Distance Learning (DL) Status: Please Add

b. Full Title: SYSTEMS FOR FACTORY INFORMATION AND CONTROL

Proposed Title: Modeling, Simulation and Control for Manufacturing

c. Current Transcript Title: SYSTEMS FACTORY INFO & CONTROL

Proposed Transcript Title: MODELING SIMULATION CONTROL FOR MFG

d. Current Cross-listing: Same as EE 605

Proposed – ADD Cross-listing :

Proposed – REMOVE Cross-listing:

e. Current Meeting Patterns

LECTURE: 3

Proposed Meeting Patterns

LECTURE: 2

LABORATORY: 2

f. Current Grading System: Graduate School Grade Scale

Proposed Grading System: *Letter (A, B, C, etc.)*

g. Current number of credit hours: 3

Proposed number of credit hours: 3

h. Currently, is this course repeatable for additional credit? No

Proposed to be repeatable for additional credit? No

If Yes: Maximum number of credit hours:

If Yes: Will this course allow multiple registrations during the same semester? No

2i. Current Course Description for Bulletin: Systems approach to manufacturing. Hardware and software for real time control and reporting. Sensor and actuators, controllers, networks, databases, hierarchical and distributed control, CAD/CAM systems, flexible manufacturing systems, group technology, modeling and simulation of factory operations. Lecture, two hours; laboratory, two hours.

Proposed Course Description for Bulletin: The purpose of this course is to examine methods and systems from the perspectives of modeling, simulation, and control of manufacturing facilities. The emphasis will be primarily on techniques that can be used to model and evaluate performance of systems. Students are encouraged to think critically about available technologies, identify relative strengths and weaknesses, and analyze the technologies toward developing improved solutions to factory control and information management problems.

2j. Current Prerequisites, if any: Prereq: MFS 505.

Proposed Prerequisites, if any: Graduate Standing

2k. Current Supplementary Teaching Component:

Proposed Supplementary Teaching Component:

3. Currently, is this course taught off campus? No

Proposed to be taught off campus? No

If YES, enter the off campus address:

4. Are significant changes in content/student learning outcomes of the course being proposed? No

If YES, explain and offer brief rationale:

5a. Are there other depts. and/or pgms that could be affected by the proposed change? No

If YES, identify the depts. and/or pgms:

5b. Will modifying this course result in a new requirement of ANY program? No

If YES, list the program(s) here:

6. Check box if changed to 400G or 500: No

Distance Learning Form

Instructor Name: Wei Li

Instructor Email: wei.mike.li@uky.edu

Internet/Web-based: Yes

Interactive Video: No

Hybrid: No

1. How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations? A study of the major manufacturing processes and equipment. Emphasis on mathematical and computer models of these processes, as used in automated manufacturing and control of these processes. Lecture, two hours; laboratory, two hours.

2. How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc. Student learning outcomes are assessed for all sections of the course, along with the usual TCE evaluations.

3. How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy; etc. Standard university policy will be followed in all academic aspects, and all quizzes and exams will be designed for distance learning.

4. Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above? Yes.

If yes, which percentage, and which program(s)? 100%; Manufacturing Systems Engineering MS Program

5. How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting? Access to student services will be the same as for other web-based courses in the University.

6. How do course requirements ensure that students make appropriate use of learning resources? Students will be required to access resources on-line using venues such as Canvas

7. Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program. Activities will be designed as web-based interactive games/simulations and posted on Canvas for student access.

8. How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (<http://www.uky.edu/UKIT/>)? Syllabus provides this access information.

9. Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? YES

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology. N/A

10. Does the syllabus contain all the required components? YES

11. I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name: Dr. Wei Li

SIGNATURE|HOLLOWAY|Lawrence E Holloway|MFS 605 CHANGE Cross-List Chair Review|20150426

SIGNATURE|BJSTOK0|Barbara J Brandenburg|MFS 605 CHANGE College Review|20150918

SIGNATURE|ZNNIKO0|Roshan Nikou|MFS 605 CHANGE Graduate Council Review|20151008

SIGNATURE|JEL224|Janie S Ellis|MFS 605 CHANGE Senate Council Review|20151013

SIGNATURE|BJSTOK0|Barbara J Brandenburg|MFS 605 CHANGE Approval Returned to College|20151022

Course Change Form

https://myuk.uky.edu/sap/bc/soap/rfc?services=

Open in full window to print or save

Generate PDF

Attachments:

Browse...

Upload File

ID	Attachment
Delete 5363	MFS 605 - Modeling Simulation and Control for Manu

First 1 Last

NOTE: Start form entry by choosing the Current Prefix and Number (*denotes required fields)

Current Prefix and Number:		MFS - Mfg Systems Engineering MFS 605 SYSTEMS FACTORY INFO & CONTROL	Proposed Prefix & Number: (example: PHY 401G) <input type="checkbox"/> Check if same as current	MFS 605
* What type of change is being proposed?		<input type="checkbox"/> Major Change <input checked="" type="checkbox"/> Major - Add Distance Learning <input type="checkbox"/> Minor - change in number within the same hundred series, excepting the same "hundred series" <input type="checkbox"/> Minor - editorial change in course title or description which does not in content or emphasis <input type="checkbox"/> Minor - a change in prerequisite(s) which does not imply a change in content or emphasis, or which is made necessary by the elimination or alteration of the prerequisite(s) <input type="checkbox"/> Minor - a cross listing of a course as described above		
Should this course be a UK Core Course? <input type="radio"/> Yes <input checked="" type="radio"/> No				
If YES, check the areas that apply:				
<input type="checkbox"/> Inquiry - Arts & Creativity <input type="checkbox"/> Composition & Communications - II <input type="checkbox"/> Inquiry - Humanities <input type="checkbox"/> Quantitative Foundations <input type="checkbox"/> Inquiry - Nat/Math/Phys Sci <input type="checkbox"/> Statistical Inferential Reasoning <input type="checkbox"/> Inquiry - Social Sciences <input type="checkbox"/> U.S. Citizenship, Community, Diversity <input type="checkbox"/> Composition & Communications - I <input type="checkbox"/> Global Dynamics				
1. General Information				
a.	Submitted by the College of: ENGINEERING		Submission Date: 10/22/2015	
b.	Department/Division: Engineering			
c.*	Is there a change in "ownership" of the course?			
	<input checked="" type="radio"/> Yes <input type="radio"/> No If YES, what college/department will offer the course instead? <input type="text" value="Select..."/>			
e.*	* Contact Person Name: Dr. Wei Li		Email: wei.mike.li@uky.edu Phone: 859-257-4842	
	* Responsible Faculty ID (if different from Contact) Dr. Wei Li		Email: wei.mike.li@uky.edu Phone: 859-257-4842	
f.*	Requested Effective Date:	<input type="checkbox"/> Semester Following Approval	OR	Specific Term: ² Fall 2015
2. Designation and Description of Proposed Course.				
a.	Current Distance Learning(DL) Status:		<input type="radio"/> N/A <input type="radio"/> Already approved for DL.* <input checked="" type="radio"/> Please Add <input type="radio"/> Please Drop	
*If already approved for DL, the Distance Learning Form must also be submitted <u>unless</u> the department affirms (by checking this box) that proposed changes do not affect DL delivery.				
b.	Full Title:	SYSTEMS FOR FACTORY INFORMATION AND CONTROL	Proposed Title: *	Modeling, Simulation and Control for Manufacturing
c.	Current Transcript Title (if full title is more than 40 characters):		SYSTEMS FACTORY INFO & CONTROL	
c.	Proposed Transcript Title (if full title is more than 40 characters):		MODELING SIMULATION CONTROL FOR MFG	
d.	Current Cross-listing:	<input type="checkbox"/> N/A	OR	Currently ³ Cross-listed with (Prefix & Number): Same as
Proposed - ADD ³ Cross-listing (Prefix & Number):				

Proposed - REMOVE ^{3d} Cross-listing (Prefix & Number):					
e. Courses must be described by at least one of the meeting patterns below. Include number of actual contact hours ² for each meeting pattern type.					
Current:	Lecture 3	Laboratory ²	Recitation	Discussion	Indep. Stu
	Clinical	Colloquium	Practicum	Research	Residency
	Seminar	Studio	Other Please explain:		
Proposed: *	Lecture 2	Laboratory ² 2	Recitation	Discussion	Indep. Stu
	Clinical	Colloquium	Practicum	Research	Residency
	Seminar	Studio	Other Please explain:		
f. Current Grading System:		Graduate School Grade Scale			
Proposed Grading System:*		<input checked="" type="radio"/> Letter (A, B, C, etc.) <input type="radio"/> Pass/Fail <input type="radio"/> Medicine Numeric Grade (Non-medical students will receive a letter grade) <input type="radio"/> Graduate School Grade Scale			
g. Current number of credit hours:		3	Proposed number of credit hours:*		3
h.* Currently, is this course repeatable for additional credit?					<input type="radio"/> Yes <input checked="" type="radio"/>
* Proposed to be repeatable for additional credit?					<input type="radio"/> Yes <input checked="" type="radio"/>
If YES:	Maximum number of credit hours:				
If YES:	Will this course allow multiple registrations during the same semester?				<input type="radio"/> Yes <input checked="" type="radio"/>
i. Current Course Description for Bulletin:					
Systems approach to manufacturing. Hardware and software for real time control and reporting. Sensor and actuators, controllers, networks, databases, hierarchical and distributed control, CAD/CAM systems, flexible manufacturing systems, group technology, modeling and simulation of factory operations. Lecture, two hours; laboratory, two hours.					
* Proposed Course Description for Bulletin:					
The purpose of this course is to examine methods and systems from the perspectives of modeling, simulation, and control of manufacturing facilities. The emphasis will be primarily on techniques that can be used to model and evaluate performance of systems. Students are encouraged to think critically about available technologies, identify relative strengths and weaknesses, and analyze the technologies toward developing improved solutions to factory control and information management problems.					
j. Current Prerequisites, if any:					
Prereq: MFS 505.					
* Proposed Prerequisites, if any:					
Graduate Standing					
*					
k. Current Supplementary Teaching Component, if any:					<input type="radio"/> Community-Based Experience <input type="radio"/> Service Learning <input type="radio"/> Both

	Proposed Supplementary Teaching Component:	<input type="radio"/> Community-Based Experience <input type="radio"/> Service Learning <input type="radio"/> Both <input type="radio"/> No Change
3.	Currently, is this course taught off campus?	<input type="radio"/> Yes <input checked="" type="radio"/> No
*	Proposed to be taught off campus?	<input type="radio"/> Yes <input checked="" type="radio"/> No
	If YES, enter the off campus address:	
4.*	Are significant changes in content/student learning outcomes of the course being proposed?	<input type="radio"/> Yes <input checked="" type="radio"/> No
	If YES, explain and offer brief rationale:	
5.	Course Relationship to Program(s).	
a.*	Are there other depts and/or pgms that could be affected by the proposed change?	<input type="radio"/> Yes <input checked="" type="radio"/> No
	If YES, identify the depts. and/or pgms:	
b.*	Will modifying this course result in a new requirement ^Z for ANY program?	<input type="radio"/> Yes <input checked="" type="radio"/> No
	If YES ^Z , list the program(s) here:	
6.	Information to be Placed on Syllabus.	
a.	<input type="checkbox"/> Check box if changed to 400G or 500.	If changed to 400G- or 500-level course you must send in a syllabus and you must include the differentiation undergraduate and graduate students by: (i) requiring additional assignments by the graduate students; and establishing different grading criteria in the course for graduate students. (See SR 3.1.4.)

Distance Learning Form

This form must accompany every submission of a new/change course form that requests distance learning delivery. This form may be required when changing a course already approved for distance learning. **Fields are required!**

Introduction/Definition: For the purposes of the Commission on Colleges Southern Association of Colleges and Schools accreditation review, **distance learning** is defined as an educational process in which the majority of the instruction (interaction between students and instructors and among students) in a course occurs when students and instructors are not in the same place. Instruction may be synchronous or asynchronous. A distance learning (DL) course may employ correspondence study, or audio, video, or computer technology.

A number of specific requirements are listed for DL courses. **The department proposing the change in delivery method is responsible for ensuring that the requirements are satisfied at the individual course level.** It is the responsibility of the instructor to have read and understood the university-level assurances regarding an equivalent DL course utilizing DL (available at <http://www.uky.edu/USC/New/forms.htm>).

Course Number and Prefix: EE/MFS 605	Date: 3/10/2015
Instructor Name: Wei Li	Instructor Email: wei.mike.li@uky.edu
Check the method below that best reflects how the majority of the course content will be delivered.	
Internet/Web-based <input checked="" type="checkbox"/>	Interactive Video <input type="checkbox"/>
Hybrid <input type="checkbox"/>	

Curriculum and Instruction

1. How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Syllabus Guidelines, specifically the Distance Learning Considerations?
 A study of the major manufacturing processes and equipment. Emphasis on mathematical and computer models of these processes, as used in automated manufacturing and control of these processes. Lecture, two hours; laboratory, two hours.
2. How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.
 Student learning outcomes are assessed for all sections of the course, along with the usual TCE evaluations.

3. How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic policy; etc.
Standard university policy will be followed in all academic aspects, and all quizzes and exams will be designed for distance learning.

4. Will offering this course via DL result in at least 25% or at least 50%* (based on total credit hours required for completion) of a degree program being offered via as defined above?
Yes.

Which percentage, and which program(s)?

100%; Manufacturing Systems Engineering MS Program

*As a general rule, if approval of a course for DL delivery results in 50% or more of a program being delivered through DL, the effective date of the course's DL defers months from the date of approval.

5. How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?
Access to student services will be the same as for other web-based courses in the University.

Library and Learning Resources

6. How do course requirements ensure that students make appropriate use of learning resources?

Students will be required to access resources on-line using venues such as Canvas

7. Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.

Activities will be designed as web-based interactive games/simulations and posted on Canvas for student access.

Student Services

8. How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and the course, such as the Information Technology Customer Service Center (<http://www.uky.edu/UKIT/>)?
Syllabus provides this access information.

9. Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)?

Yes

No

If no, explain how students enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

N/A

10. Does the syllabus contain all the required components, below? Yes

- Instructor's *virtual* office hours, if any.
- The technological requirements for the course.
- Contact information for Distance Learning programs (<http://www.uky.edu/DistanceLearning>) and Information Technology Customer Service Center (<http://www.uky.edu/UKIT/Help/>; 859-218-HELP).
- Procedure for resolving technical complaints.
- Preferred method for reaching instructor, e.g. email, phone, text message.
- Maximum timeframe for responding to student communications.
- Language pertaining academic accommodations:
 - "If you have a documented disability that requires academic accommodations in this course, please make your request to the University Disability Resource Center. The Center will require current disability documentation. When accommodations are approved, the Center will provide you with a Letter of Accommodation that details the recommended accommodations. Contact the Disability Resource Center, Jake Karnes, Director at 859-257-2754 or jkarnes@email.uky.edu
- Specific dates of face-to-face or synchronous class meetings, if any.
- Information on Distance Learning Library Services (<http://www.uky.edu/Libraries/DLLS>)
 - Carla Cantagallo, DL Librarian
 - Local phone number: 859 257-0500, ext. 2171; long-distance phone number: (800) 828-0439 (option #6)
 - Email: dllservice@email.uky.edu
 - DL Interlibrary Loan Service: http://www.uky.edu/Libraries/llboage.php?lweb_id=253&lib_id=16

11. I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name:

Dr. Wei Li

Abbreviations: DLP = Distance Learning Programs ATG = Academic Technology Group Customer Service Center = 859-218-HELP (<http://www.uky.edu/UKIT/Help/>)

Revised 3/03

¹²³See comment description regarding minor course change. *Minor changes are sent directly from dean's office to Senate Council Chair.* If Chair deems the change as "n form will be sent to appropriate academic Council for normal processing and contact person is informed.

¹²⁴Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.

¹²⁵Signature of the chair of the cross-listing department is required on the Signature Routing Log.

¹²⁶Removing a cross-listing does not drop the other course – it merely unlinks the two courses.

¹²⁷Generally, undergrad courses are developed such that one semester hr of credit represents 1 hr of classroom meeting per wk for a semester, exclusive of any lab meeting generally represents at least two hrs per wk for a semester for 1 credit hour. (See SR 5.2.1.)

¹²⁸You must *also* submit the Distance Learning Form in order for the course to be considered for DL delivery.

¹²⁹In order to change a program, a program change form must also be submitted.

University of Kentucky
MFS/EE 605: Modeling, Simulation and Control for Manufacturing
Fall 2015

Course Description

The purpose of this course is to examine methods and systems from the perspectives of modeling, simulation, and control of manufacturing facilities. The emphasis will be primarily on techniques that can be used to model and evaluate performance of systems. Students are encouraged to think critically about available technologies, identify relative strengths and weaknesses, and analyze the technologies toward developing improved solutions to factory control and information management problems.

Instructor

Wei Li, Ph.D., P.E.

Room 414J, CRMS Building

Phone: (859) 257-4842, E-mail: wei.mike.li@uky.edu

Virtual Office: <https://connect.uky.edu/MFS605-online/>

Office hours: Wednesdays from 6:00 – 7:00 PM (online through Adobe Connect)

Student Learning Outcomes

Upon completion of this course, students are expected to

- Understand the relationship among optimization objectives, constraints, and solutions in different settings
- Prove the tradeoff between optimization objectives in manufacturing systems, e.g., holding cost and production cost in the inventory control models
- Identify necessary information in manufacturing systems for planning, scheduling and control
- Identify and quantify disturbances in production planning, scheduling, and control
- Formulate a mathematical model for relative problems in manufacturing systems
- Develop a simulation model for a specific problem
- Establish solutions through simulation and data analysis for adaptive control

Course Contents and Structure

There are four modules to be covered in this course.

- Module 1 will be an overview of manufacturing systems, specifically covering:
 - Shop floor structure, planning and scheduling, characteristics of production;
 - Disturbances in manufacturing systems, and modeling of some disturbances;
 - The impact of production planning, scheduling, and control on manufacturing systems in different settings.

This module is mainly to give students a broad view of manufacturing systems, to familiarize students with modeling, and to make students understand the purpose of modeling.

- Module 2 is will focus on queueing theory and statistical analysis, specifically covering:
 - Mathematical proof of different types of queues and their application;
 - Derivation of Little's Law;
 - Statistical process control and data analysis.

This module is to equip students with some analysis techniques. The emphasis is on mathematical proof, and consequently students can apply these techniques to model solve new problems.

- Module 3 will address inventory control, specifically covering:
 - Economic order quantity (*EOQ*) model;
 - Dynamic lot sizing model;
 - Statistical inventory model, (*Q, r*) model and their application in manufacturing systems.

This module is to equip students with different evaluation techniques. The emphasis is to let students understand the impact of production on manufacturing systems, and be aware of the essence of modeling, because different objectives, different evaluations, and different settings will generate different solutions to the same problem in the same system.

- Module 4 is will introduce simulation to students, specifically covering:
 - Simulation of a manufacturing system, which is under disturbances such as variance in processing times, machine breakdown, order insertion and cancellation, and operator reallocation;
 - Extension of simulation from manufacturing systems to other systems, such as hospitals, supply chains.

Matlab and/or R will be used for simulation. This module is to let students apply techniques in module 2 to a specific problem setting in module 1, but evaluate the performance differently as in module 3, to see the impact of production on manufacturing systems.

Reference Textbooks (Optional)

- [1] Askin, R.G., Standridge, C.R. *Modeling and Analysis of Manufacturing Systems*, John Wiley and Sons, New York: 1993.
- [2] Hopp, W.J., Spearman, M.L. *Factory Physics*, 2nd Edition, McGraw-Hill, Boston: 2000.
- [3] Hastie, T., Tibshirani, R., Friedman, J. *The Elements of Statistical Learning*, Springer: 2009.
- [4] Nelson, B.L. *Stochastic Modeling, Analysis, and Simulation*, McGraw-Hill, New York: 1995.
- [5] Additional Handouts

Grading

The course grades will be based on one semester project (20%), one simulation project (20%), four homework (20%), two reading summaries (10%), and three quizzes (30%).

Semester Project: Each student will be expected to complete a semester project. The project will be an in-depth examination or analysis of some topic related to the class material. Each student will submit a written report describing his or her project, and may do a presentation on it in class.

Simulation Project: Simulation has become a common tool for planning and evaluation of manufacturing systems. To provide the students with an introduction to manufacturing

simulation, students will write simulations demonstrating factory control policies and will evaluate the data.

Homework: Approximately four homework will be required during the semester. These will illustrate the students' understanding of the current class material.

Independent Reading Statements: Students are expected to examine manufacturing issues beyond the class readings. Two times during the semester students are expected to prepare a reading statement on a reading of their choice (related to the course). A copy of the reading should be turned in with the statement. An in-class presentation is expected for each statement, which is beneficial to other students.

The reading may be selected from current trade magazines, newspapers, or technical publications. Examples include *Management Science* (MSc), *Operations Research* (OR), *Production and Operations Management* (POM), *International Journal of Advanced Manufacturing Technology* (IJAMT), *Journal of Manufacturing Systems* (IMS), *International Journal of Production Research* (IJPR), etc.

Quizzes: There will be three small quizzes, each worth 10%.

Grading Scheme: A [90 ~ 100], B [80 ~ 89], C [70 ~ 79]. (Graduate students cannot receive a grade lower than C)

Attendance: Attendance in all the synchronous sessions is mandatory. See below for policy regarding Excused Absences. A grade of zero will be given for all unexcused absences from exams. Make-ups will be given only in cases of excused absences. Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class.

Excused Absences: Students need to notify the professor of absences prior to class when possible. S.R. 5.2.4.2 defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit "reasonable cause for nonattendance" by the professor.

Students anticipating an absence for a major religious holiday are responsible for *notifying the instructor in writing of anticipated absences* due to their observance of such holidays *no later than the last day in the semester to add a class*. Information regarding dates of major religious holidays may be obtained through the religious liaison, Mr. Jake Karnes (859-257-2754).

Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused or unexcused) per university policy.

Verification of Absences: Students may be asked to verify their absences in order for them to be considered excused. Senate Rule 5.2.4.2 states that faculty have the right to request "appropriate verification" when students claim an excused absence because of illness or death in the family. Appropriate notification of absences due to university-related trips is required prior to the absence.

Late Submission Policy: Students who wish to submit a homework assignment/report later than the due date should obtain permission in advance from the instructor; otherwise, it will be treated as failure to submit the assignment as required. The number of additional days provided to submit the assignment/report will be decided by the instructor based on the reasoning for the delay.

Points will be deducted for every late submitted assignment/report if delayed further than the extended deadline. Five percent of the grade will be taken off for each day the submission is delayed from the newly stipulated deadline.

Make-up Policy for Missed Work with an Excused Absence: Those students who have obtained prior permission from the instructor to have an excused absence will have one week to contact instructor regarding missed graded work.

Student Interaction

E-mail: UK email addresses will be used. Students must activate e-mail forwarding if they prefer another primary e-mail address.

Blackboard Access: Blackboard will be used to communicate course content, announcements, exam grades, etc. To access UK's Blackboard go to www.uky.edu and click on LINK BLUE then BLACKBOARD.

Technical Support: Students experiencing difficulty with delivery of the course material should contact the instructor or the UK help desk. Links to UK help are available on the Blackboard login page. For difficulties with Blackboard or logins, contact the Teaching and Academic Support Center <http://www.uky.edu/ukit/atg/tasc>, or the Information Technology Customer Support Center at <https://www.uky.edu/ukit/help>, and inform the instructor.

Academic Integrity

Per university policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the university may be imposed.

Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete information can be found at the following website: <http://www.uky.edu/Ombud>. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Part II of Student Rights and Responsibilities (<http://www.uky.edu/StudentAffairs/Code/part2.html>) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about the question of plagiarism involving their own work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgement of the fact, the students are guilty of plagiarism. Plagiarism includes reproducing someone else's work, whether it be a published article, chapter of a book, a paper from a friend or some file, or something similar to this. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work, which a student submits as his/her own, whoever that other person may be.

Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, the student, and the student alone must do it. When a student's assignment involves research in outside sources of information, the student must carefully acknowledge exactly what, where and how he/she employed them. If the words of someone else are used, the student must put quotation

marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas, which are so generally, and freely circulated as to be a part of the public domain (Section 6.3.1).

***Please note: Any assignment you turn in may be submitted to an electronic database to check for plagiarism.

Accommodations due to disability:

If you have a documented disability that requires academic accommodations, please see the Course Coordinator as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide the Course Coordinator with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, email address: jkarnes@email.uky.edu) for coordination of campus disability services available to students with disabilities.

Classroom Behavior Policies: This course and its participants will not tolerate discrimination, violence, or vandalism. This course and its affiliated colleges are open and affirming colleges for all people, including those who are subjected to racial profiling, hate crimes, heterosexism, and violence. We insist that appropriate action be taken against those who perpetrate discrimination, violence, or vandalism. The University of Kentucky is an Affirmative Action and Equal Opportunity institution and affirms its dedication to non-discrimination on the basis of race, color, religion, gender, age, sexual orientation, domestic partner status, national origin, or disability in employment, programs, and services. Our commitment to non-discrimination and affirmation action embraces the entire university community including faculty, staff, and students.

All students are expected to conduct themselves in an appropriate and ethical manner during their UK classes, as befitting students and ambassadors for the University of Kentucky. Any unethical behavior in class or during any field trips may result in failure for the course, determined on a case-by-case basis. Faculty will follow all university due process procedures in cases of academic or ethical misconduct.