

Nikou, Roshan

From: Graduate.Council.Web.Site@www.uky.edu
Sent: Tuesday, December 02, 2008 10:05 PM
To: Nikou, Roshan
Cc: Price, Cleo
Subject: Investigator Report

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Client Address: 75.90.150.105

College/Department/Unit: = MFS 603
Category:_ = New
Date_for_Council_Review: = 12/4/08
Recommendation_is:_ = Approve
Investigator: = Bill Smith
E-mail_Address = bsmith@enr.uky.edu
1__Modifications: = None
2__Considerations: = N/A
3__Contacts: =
4__Additional_Information: = Needs to remove a \"D\" grade from the application's sample syllabus.

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APPLICATION FOR NEW COURSE

1. Submitted by the College of Engineering Date: January 22, 2008

Department/Division proposing course: Mechanical Engineering

2. Proposed designation and Bulletin description of this course:

a. Prefix and Number MFS 603

b. Title Management for a Lean System

*If title is longer than 24 characters, write a sensible title (24 characters or less) for use on transcripts:

c. Courses must be described by at least one of the categories below. Include the number of actual contact hours per week for each category, as applicable.

- CLINICAL COLLOQUIUM DISCUSSION LABORATORY LECTURE
 INDEPEND. STUDY PRACTICUM RECITATION RESEARCH RESIDENCY
 SEMINAR STUDIO OTHER - Please explain: _____

d. Please choose a grading system: Letter (A, B, C, etc.) Pass/Fail

e. Number of credit hours: 3

f. Is this course repeatable? YES NO If YES, maximum number of credit hours: _____

g. Course description:

h. Prerequisite(s), if any:
MFS 503

i. Will this course be offered through Distance Learning? YES NO
 If YES, please identify one of the methods below that reflects how the majority of the course content will be delivered:

- Internet/Web-based Interactive video Extended campus Kentucky Educational Television (KET/teleweb) Other

Please describe "Other": _____

3. Teaching method: N/A or Community-Based Experience Service Learning Component Both

4. To be cross-listed as: _____
 Prefix and Number Signature of chair of cross-listing department

5. Requested effective date (term/year): August 11, 2008

APPLICATION FOR NEW COURSE

6. Course to be offered (please check all that apply): Fall Spring Summer.

7. Will the course be offered every year? YES NO

If NO, please explain: _____

8. Why is this course needed?

This course provides the MFS student an opportunity to develop skills in managing a lean system at the "Shop floor" level

9. a. By whom will the course be taught? Dr. Arlie Hall

b. Are facilities for teaching the course now available? YES NO

If NO, what plans have been made for providing them?

10. What yearly enrollment may be reasonably anticipated?

Twenty to twenty five students

11. a. Will this course serve students primarily within the department? Yes No

b. Will it be of interest to a significant number of students outside the department? YES NO

If YES, please explain. _____

12. Will the course serve as a University Studies Program course[†]? YES NO

If YES, under what Area? _____

[†]AS OF SPRING 2007, THERE IS A MORATORIUM ON APPROVAL OF NEW COURSES FOR USP.

13. Check the category most applicable to this course:

traditional – offered in corresponding departments at universities elsewhere

relatively new – now being widely established

not yet to be found in many (or any) other universities

14. Is this course applicable to the requirements for at least one degree or certificate at UK? Yes No

15. Is this course part of a proposed new program? YES NO

If YES, please name: _____

16. Will adding this course change the degree requirements for ANY program on campus? YES NO

If YES[‡], list below the programs that will require this course: _____

[‡]In order to change the program(s), a program change form(s) must also be submitted.

APPLICATION FOR NEW COURSE

17. The major teaching objectives of the proposed course, syllabus and/or reference list to be used are attached.
18. Check box if course is 400G or 500. If the course is 400G- or 500-level, you must include a syllabus showing differentiation for undergraduate and graduate students by (i) requiring additional assignments by the graduate students; and/or (ii) the establishment of different grading criteria in the course for graduate students. (See SR 3.1.4)

19. Within the department, who should be contacted for further information about the proposed new course?

Name: Dr. Arlie Hall Phone: 859-257-6262 x 42 Email: hall@engr.uky.edu

20. Signatures to report approvals:

1/23/2008
DATE of Approval by Department Faculty

Bruce Walcott B. J. Walcott
printed name Reported by Department Chair signature

9/29/08
DATE of Approval by College Faculty

RICHARD J. SWEIGARD Richard J. Sweigard
printed name Reported by College Dean signature

* DATE of Approval by Undergraduate Council

1
printed name Reported by Undergraduate Council Chair signature

2/20/08
* DATE of Approval by Graduate Council

Brian McIsaac Brian McIsaac
printed name Reported by Graduate Council Chair signature

* DATE of Approval by Health Care Colleges Council (HCCC)

1
printed name Reported by Health Care Colleges Council Chair signature

* DATE of Approval by Senate Council

Reported by Office of the Senate Council

* DATE of Approval by University Senate

Reported by Office of the Senate Council

*If applicable, as provided by the *University Senate Rules*

MFS 603
MANAGEMENT FOR A LEAN SYSTEM

INSTRUCTOR: Dr. Arlie Hall, RM 414E Center for Manufacturing, Office
Telephone #859-257-6262, Ex 434; Cell # 859-333-6329, E-mail
hall@engr.uky.edu; arliehall@aol.com

LOCATION: TBA

TEXT: *Guide to Quality Control* by Kaoru Ishikawa.
Instructor notes will be provided to the student along with
supplemental reading assignments.

COURSE DESCRIPTION: The course presents operating principles and practices at the "shop floor" level; group theory is at the heart of shop floor operations. Teams and team dynamics principles are the primary focus area of shop floor operations—the roles of the team member, team leader, group leader, and the supervisors are defined. At the individual level, the social psychology of groups and teams will be reviewed. Other subjects presented, at the detail level, are: continuous improvement (kaizen); industrial engineering practices—motion study analysis; learning curve theory; cognitive skill development theory as a part of work; job instruction training; and facilitation of problem solving using the Deming Plan-Do-Check-Act cycle.

LEARNING OBJECTIVES: Upon completion of this course, the student will be able to:

1. Develop a "shop floor" management transformation strategy, from traditional to lean systems;
2. Apply industrial engineering motion economy;
3. Identify team and team dynamics principles in a lean operation;
4. Discuss social psychology theory as applied to individual behaviors.
5. Apply learning curve theory to lean systems; and
6. Apply basic statistics at the team level in managing quality;

TEAM PROJECT: Teams will be formed, consisting of three to five team members, and given assignments in the lean laboratory. The various assignments that will be given to teams are such as: quality management; cost management; delivery management, and other management issues. Solutions to assignments are to be developed and presented to the class as findings and a written report provided to the instructor.

GRADING: This course will follow the standard letter grading guidelines for the College of Engineering. Details of grading breakdowns will be provided in writing in the first class for the semester.

Grading Scale for Graduate Students

100-90% = A

89.9-80% = B

79.9-70% = C

< 69.9% = E

GRADING SCALE:

A = 90 - 100

B = 80 - 89

C = 70 - 79

D = 60 - 69

E = 59 & below

wrong