

**APPLICATION FOR CHANGE IN EXISTING COURSE: MAJOR and MINOR**

1. Submitted by the College of Public Health Date: 06/30/09  
 Department/Division offering course: Health Services Management

2. What type of change is being proposed?  Major  Minor\*  
 \*See the description at the end of this form regarding what constitutes a minor change. Minor changes are sent directly from the dean of the college to the Chair of the Senate Council. If the Senate Council chair deems the change not to be minor, the form will be sent to the appropriate Council for normal processing and an email notification will be sent to the contact person.

3. Current Distance Learning (DL) status:  N/A  Already approved for DL<sup>†</sup>  Please Add  Please Drop  
 If ADDING, check one of the methods below that reflects how the majority of the course content will be delivered.  
 Internet/Web-based  Interactive Video  Extended Campus

<sup>†</sup>If already approved for DL, a new Distance Learning Form must be submitted with this form unless the department affirms (by checking this box)  that the proposed course changes will not affect DL delivery.

**PROPOSED CHANGES**

Please complete all "Current" fields.  
 Fill out the "Proposed" field only for items being changed. Enter N/A if not changing.  
 Circle the number for each item(s) being changed. For example: (6.)

4. Current prefix & number: HA 623 Proposed prefix & number: HA 623  
 5. Current Title: Decision analysis and decision support systems  
 Proposed Title<sup>†</sup>: same  
<sup>†</sup>If title is longer than 24 characters, offer a sensible title of 24 characters or less: Decision analysis

6. Current number of credit hours: 3 Proposed number of credit hours: 3

7. Currently, is this course repeatable? YES  NO  If YES, current maximum credit hours: \_\_\_\_\_  
 Proposed to be repeatable? YES  NO  If YES, proposed maximum credit hours: \_\_\_\_\_

8. Current grading system:  Letter (A, B, C, etc.)  Pass/Fail  
 Proposed grading system:  Letter (A, B, C, etc.)  Pass/Fail

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

Current:

CLINICAL  COLLOQUIUM  DISCUSSION  LABORATORY  3 LECTURE  
 INDEPEND. STUDY  PRACTICUM  RECITATION  RESEARCH  RESIDENCY  
 SEMINAR  STUDIO  OTHER - Please explain: \_\_\_\_\_

Proposed:

CLINICAL  COLLOQUIUM  DISCUSSION  LABORATORY  3 LECTURE  
 INDEPEND. STUDY  PRACTICUM  RECITATION  RESEARCH  RESIDENCY  
 SEMINAR  STUDIO  OTHER - Please explain: \_\_\_\_\_

10. Requested effective date (term/year): Fall / 2009

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11. Supplementary teaching component:  N/A     Community-Based Experience     Service Learning     Both  
*Proposed supplementary teaching component:*     Community-Based Experience     Service Learning     Both

12. Cross-listing:  N/A or PA 623 / \_\_\_\_\_  
Current Prefix & Number    printed name    Current Cross-listing Department Chair    signature
- a. *Proposed - REMOVE current cross-listing:*  \_\_\_\_\_ / \_\_\_\_\_  
printed name    Current Cross-listing Department Chair    signature
- b. *Proposed - ADD cross-listing:* \_\_\_\_\_ / \_\_\_\_\_  
Prefix & Number    printed name    Proposed Cross-listing Department Chair    signature

13. Current prerequisites:  
MHA program admission status, PA/HA 621
- 
- Proposed prerequisites:*  
same

14. Current Bulletin description:  
An introduction to organizational decision making under conditions of certainty, uncertainty, risk and multiple objectives. Concepts of analysis from the areas of economics, mathematics, probability, and statistics will be utilized in terms of administrative decision making in public administration. Course work includes use of various management information systems with a focus on how such systems can be used to support and inform decision making.
- 
- Proposed Bulletin description:*  
An introduction to organizational decision making under conditions of certainty, uncertainty, risk and multiple objectives. Concepts of analysis from the areas of economics, mathematics, probability, and statistics will be utilized in terms of administrative decision making in health administration. Course work includes use of various management information systems with a focus on how such systems can be used to support and inform decision making.

15. What has prompted this change?  
MHA program move to College of Public Health

16. If there are to be significant changes in the content or teaching objectives of this course, indicate changes:  
Previously offered jointly with MPA program, now to be offered jointly with MPH program.

17. Please list any other department that could be affected by the proposed change:  
\_\_\_\_\_

18. Will changing this course change the degree requirements for ANY program on campus?     YES     NO  
If YES<sup>†</sup>, list below the programs that require this course:  
\_\_\_\_\_

<sup>†</sup> In order for the course change to be considered, program change form(s) for the programs above must also be submitted.

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19. Is this course currently included in the University Studies Program?  Yes  No

20.  Check box if changed to 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)

21. Within the department, who should be contacted for further information on the proposed course change?

Name: Julia F. Costich Phone: 7-6712 Email: julia.costich@uky.edu

22. Signatures to report approvals:

5/27/09  
DATE of Approval by  
Department Faculty

JULIA F. COSTICH / Julia F Costich  
printed name Reported by Department Chair signature

5/29/09  
DATE of Approval by College  
Faculty

Stephen Wyatt / [Signature]  
printed name Reported by College Dean signature

\*DATE of Approval by  
Undergraduate Council

/  
printed name Reported by Undergraduate Council Chair signature

\*DATE of Approval by Graduate  
Council

/  
printed name Reported by Graduate Council Chair signature

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

/  
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 the  
University Senate

/  
Reported by the Office of the Senate Council

\*If applicable, as provided by the *University Senate Rules*. (<http://www.uky.edu/USC/New/RulesandRegulationsMain.htm>)

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Excerpt from *University Senate Rules*:

SR 3.3.0.G.2: **Definition.** A request may be considered a minor change if it meets one of the following criteria:

- a. change in number within the same hundred series;
- b. editorial change in the course title or description which does not imply change in content or emphasis;
- c. a change in prerequisite(s) which does not imply change in content or emphasis, or which is made necessary by the elimination or significant alteration of the prerequisite(s);
- d. a cross-listing of a course under conditions set forth in SR 3.3.0.E;
- e. correction of typographical errors.

## Decision Analysis and Decision Support Systems

PA/HA 623 - 001

Fall 2007

Monday & Wednesday 4:30 – 5:45 PM

<b>Professor:</b>	Sarah Wackerbarth, Ph.D.	<b>Office:</b>	435 Patterson Office Tower
<b>Phone:</b>	257-5145	<b>E-Mail:</b>	sbwack0@uky.edu
<b>Fax:</b>	323-1937	<b>Office Hours:</b>	MW 3:30 – 4:30 or by appt.

### Required Materials

- Farrokh Alemi & David H. Gustafson. (2007). Decision Analysis for Healthcare Managers. Health Administration Press. ISBN: 1567932568.
- Goal/QPC. (2000). The Problem Solving Memory Jogger: Seven Steps to Improved Processes; Spiral edition. ISBN: 1576810313
- Paula Martin & Karen Tate (1997). The Project Management Memory Jogger: A Pocket Guide for Project Teams. Goal/QPC. ISBN: 1576810011

### Course Description

An introduction to organizational decision making under conditions of certainty, uncertainty, and risk. Concepts of analysis from the areas of economics, mathematics, and statistics will be utilized in terms of administrative decision making in public administration.

### Course Objectives

1. To understand “how people make decisions” and “how people might make better decisions”.
2. To be able to model and analyze decisions made under risk and uncertainty.
3. To become familiar with analytic tools and modeling techniques.
4. To develop an understanding of the fundamentals of probability.
5. To be better equipped to use data to inform decisions.
6. To apply the tools and concepts developed in the course in making real world decisions.

### Policies

- Students are expected to attend all classes and to have read the course material for that class.
- You must turn in all assignments to pass the course. Assignments are due at the beginning of class. Late assignments will be assessed a 10% penalty.
- Makeup exams will be given only for university defined excused absences. Case-by-case pre-approved exceptions will be given for holidays.
- Cheating, including plagiarism will not be tolerated in this course. Consult the UK student handbook for what constitutes cheating. Serious cheating offenses may result in a failing grade for the course or expulsion from the University. You can find the UK Statement of Student Rights and Responsibilities at <http://www.uky.edu/StudentAffairs/Code/>.
- The instructor reserves the right to change this syllabus at any time.
- Final grades will be assigned as follows: 100 – 90.0% = A, 89.9 – 80.0% = B, 79.9 – 70.0% = C, below 69.9% = E.

## Course Requirements

Grades will be calculated as follows:

		Scale:	
Homework (6 @ 5% each)	30%		
Proposal	10%	90.0 – 100	A
In-Class Exercises & Discussions	5%	80.0 – 89.9	B
Midterm Exam	25%	70.0 – 79.9	C
Final Exam	30%	69.9 and below	E
Total	100%		

### Homework

Six homework assignments provide the opportunity to practice the tools of decision analysis. Completion of the homework will keep you on pace with the material and provide the opportunity for me to give you individual feedback on your progress. HW #1 (Decision Profile) involves profiling a decision depicted in a movie. HW #4 (Spreadsheet Modeling) requires use of spreadsheet software such as Microsoft Excel. Students can work through problems with others, but must hand in independent work. To avoid any questions regarding collaborative efforts, always note those with whom you worked. In some instances the grade is based on the response to a sub-set of the assigned problems.

### Midterm and Final Exam

For exams, students will be allowed one 8½" x 11" sheet of notes and a calculator. Both exams will include math-type problems (70%) and short answer questions (30%). The midterm will cover material presented prior to that date. The final will emphasize the material from the later portion of the course, but due to the progressive nature of the course, material from the first half of the class will also be addressed. A short review period will be held during the class prior to each exam. I suggest that students consider studying for exams in groups. The exams are, however, independent and in-class activities.

Date	Lecture Topics – Spring 2006	Reading	Homework due today
8/22	Introduction Difficulties in Decision Making		
8/27	Profiling the Decision Decision Elements	Ch 1	
8/29	Decision Prototypes Decision Rules: Hurwicz, Wald, Savage & Laplace		
9/3	No Class (Labor Day Holiday)		
9/5	Modeling Preferences Trade-offs Multi-Attribute Utility (MAU) Models	Ch 2	HW #1 Decision Profile
9/10	MAU Models		
9/12	Consequence Tables Decision Rules: Even Swaps, Satisficing, Selection by Aspects, Elimination by Aspects		
9/17	Uncertainty Probability Basics Bayes' Theorem	Ch 3	
9/19	Subjective Probability Psychological Traps Biases	Ch 4	HW #2 Multi-Attribute Decisions
9/24	Decision Trees Expected Monetary Value	Ch 5	
9/26	Sensitivity Analysis		
10/1	Value of Perfect Information		
10/3	Root Cause Analysis	Ch 7	
10/8	Risk Analysis	Ch 9	HW #3 Decision Trees, Sensitivity Analysis & Perfect Information
10/10	Midterm Exam review		
10/15	Midterm Exam		
10/17	No Class		
10/22	Spreadsheet modeling		
10/24	Expected Value Imperfect Information		
10/29	Dominance Risk Profiles		
10/31	No Class		HW #4 Spreadsheet Modeling
11/5	Risk Tolerance/Attitudes Utility Function Assessment		
11/7	Decision Trees & Utility Linked & Sequential Decisions	Ch 8	
11/12	Application of Decision Analysis	Ch 12 Ch 13	
11/14	Problem Solving and Project Management	Goal/QPC Martin & Tate	HW #5 Decision Trees & Utility
11/19	Group Decision Making	Ch 6	
11/21	No Class (Thanksgiving Holiday)		
11/26	Group Decision Making		HW #6 Group Decision Making
11/28	Negotiation Conflict Analysis	Ch 11	
12/3	No Class		
12/5	Final Exam review		Proposal

Final Exam: Wednesday 12/12/07; 3:30 – 5:30pm