

APPLICATION FOR CHANGE IN EXISTING COURSE: MAJOR and MINOR

1. Submitted by the College of Engineering Date: 2-February-2009
 Department/Division offering course: Mining Engineering

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.

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.)

3. Current prefix & number: MNG 592 Proposed prefix & number: MNG 592

4. Current Title Mine Design Project II
 Proposed Title* Mine Design Project II

*If title is longer than 24 characters, offer a sensible title of 24 characters or less: _____

5. Current number of credit hours: 3 Proposed number of credit hours: 2

6. 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: _____

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

8. 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 (2) LABORATORY (2) LECTURE
 () INDEPEND. STUDY () PRACTICUM () RECITATION () RESEARCH () RESIDENCY
 () SEMINAR () STUDIO () OTHER - Please explain: _____

Proposed:

() CLINICAL () COLLOQUIUM () DISCUSSION (3) LABORATORY (1) LECTURE
 () INDEPEND. STUDY () PRACTICUM () RECITATION () RESEARCH () RESIDENCY
 () SEMINAR () STUDIO () OTHER - Please explain: _____

9. Requested effective date (term/year): Spring / 2011

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

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11. Cross-listing: N/A
Current Prefix & Number: _____ Current Cross-listing Department Chair: _____

a. Proposed – REMOVE current cross-listing:
Current Cross-listing Department Chair: _____

b. Proposed – ADD cross-listing: _____
Prefix & Number: _____ Proposed Cross-listing Department Chair: _____

12. Current Distance Learning (DL) status: Already approved for DL Please Add Please Drop
If PROPOSING, 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

13. Current prerequisites:
MNG 341, MNG 551, MNG 591, and Engineering Standing

Proposed prerequisites:
MNG 341, MNG 551, MNG 591, and Engineering Standing

14. Current Bulletin description:
Students will undertake a major design project such as the overall design of a mining system, including design of major components of the system and economic evaluation. Students will write reports documenting this design, which will also be presented orally before a group of peers and invited experts. Lecture, one hour; lab, three hours. Prereq: MNG 341, MNG 551, MNG 591, and Engineering Standing.

Proposed Bulletin description:
Students will undertake a major design project such as the overall design of a mining system, including design of major components of the system and economic evaluation. Students will write reports documenting this design, which will also be presented orally before a group of peers and invited experts. Lecture, one hour; lab, three hours. Prereq: MNG 341, MNG 551, MNG 591, and Engineering Standing.

15. What has prompted this change?
Changes in MNG 591 and MNG 592 are requested to balance work load in from one credit hour in MNG 591 and Three credit hours in MNG 592 to two credit hours in each course. (See #9 of Program Change Application.)

16. If there are to be significant changes in the content or teaching objectives of this course, indicate changes:
Some of the content, specifically, a preliminary mine desing and equipment selection, previously contained in MNG 592 will now be included in MNG 591

17. Please list any other department that could be affected by the proposed change:
None

18. Will changing this course change the degree requirements for ANY program on campus? YES NO
If YES², list below the programs that require this course:
Mining Engineering. This course change is part of a program change in mining engineering.

² In order for the course change to be considered, program change form(s) for the programs above must also be submitted.

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

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20. Check box if changed to 400G or 500. 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: Braden Lusk Phone: 257-1105 Email: lusk@enr.uky.edu

22. Signatures to report approvals:

<p><u>11-11-08</u> DATE of Approval by Department Faculty</p>	<p><u>Rick Honaker</u> / <u>Rick Honaker</u> Reported by Department Chair</p>	<p><u>11-20-09</u> DATE of Approval by College Faculty</p>	<p><u>RICHARD J. SWEIGARD</u> / <u>Richard J. Sweigard</u> Reported by College Dean</p>
<p><u>1-19-2010</u> *DATE of Approval by Undergraduate Council</p>	<p><u>S. Gill</u> / <u>S. Gill</u> Reported by Undergraduate Council Chair</p>	<p><u> </u> *DATE of Approval by Graduate Council</p>	<p><u> </u> / <u> </u> Reported by Graduate Council Chair</p>
<p><u> </u> *DATE of Approval by Health Care Colleges Council (HCCC)</p>	<p><u> </u> / <u> </u> Reported by Health Care Colleges Council Chair</p>	<p><u> </u> *DATE of Approval by Senate Council</p>	<p><u> </u> / <u> </u> Reported by Office of the Senate Council</p>
<p><u> </u> *DATE of Approval by the University Senate</p>	<p><u> </u> / <u> </u> Reported by the Office of the Senate Council</p>		

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

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.

Proposed Syllabus

Syllabus Mining 592 – Mine Design Project II

Spring Semester 2010

Dr. Braden Lusk - lusk@engr.uky.edu

Office: 234D MMRB Phone:257-1105

Course Description:

Students will undertake a major design project such as the overall design of a mining system, including design of major components of the system and economic evaluation. Students will write reports documenting this design, which will also be presented orally before a group of peers and invited experts. Lecture, one hour; lab, three hours. Prereq: MNG 341, MNG 551, MNG 591, and Engineering Standing.

Class Goal:

Complete the mine design project started in MNG 591.

Outcomes tied to ABET a-k:

Outcome	Program Outcome	Implementation Strategy
1. Students will be able to design a mining operation according to industry standards. This task will require the students to understand mine design and acquire information about specific components of the overall system. MNG 592 is the capstone course for mining engineering and thus encompasses many of the Learning outcomes of the program.	(a), (c), (e), (k)	Finalized Report
2. Students will work in a team and address the difficulties of group work by producing a quality design. The group will need to utilize multiple disciplines to complete the overall design.	(d)	Deadline Tracking and Teamwork Documentation
3. Students will present the product of their mine design in front of the program faculty and industry experts	(g)	Presentation

Grading Policy:

	Undergraduate Students	Graduate Students
Design Project Report	50%	45%
Report Components	25%	20%
Presentation of Design	25%	20%
Optimization	NA	15%

Grading Scale

	Undergraduate Students	Graduate Students
90% - 100%	A	A
80% - 89.9%	B	B
70% - 79.9%	C	C
60% - 69.9%	D	E
< 60%	E	E

Proposed Syllabus

Additional Requirement for Graduate Students:

Graduate students will be required to meet additional requirements for successful completion of the course. Graduate students will be required to demonstrate an optimization process for a significant portion of the design. The requirement will be met by selecting at least one major component of the design and performing an iterative optimization process. The process will be documented in the report and presentation.

Design Project Report:

Students will be required to complete a comprehensive mine design project that was initiated in MNG 591. The report will cover nearly all aspects of mine design including:

1. Rock Mechanics
2. Mine Ventilation
3. Mine Plant Machinery
4. Corresponding Mine Regulations
5. Mineral Deposits
6. Exploration, sampling and deposit evaluation
7. Design Principles, methodology and stages of mine design
8. Capital development (shafts, slopes)
9. Mine Layout
10. Economic Analysis

Report Components:

In order to complete the design project, due dates will be assigned for specific components of the mine design. These deadlines must be met in order to successfully complete the project on time.

Presentation of Design:

Each group will be required to present their mine design to the department faculty and invited industry experts.

Class participation:

Questions are encouraged. Participation in hands on portions is required and graded accordingly. Class attendance is required. A student must arrive within 5 minutes of the scheduled start of class and must stay for the remainder of the period to be credited for attendance. Your grade will be reduced by 5% for each week-equivalent of class missed beyond one week. For example, since Mining 699 meets 2 times per week, the following grade reductions would be incurred:

Number of Unexcused Absences	Grade Reduction
1-2	0%
3-4	5%
5-6	10%

Excused absences, as defined in the University Bulletin, are not counted in this total. Repeated absences will result in grade deductions.

Textbook:

Course Notes (provided)