

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 591 Proposed prefix & number: MNG 591

4. Current Title Mine Design Project I

Proposed Title' Mine Design Project I

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

5. Current number of credit hours: 1 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 (1) LABORATORY (1) 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): Fall / 2010

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 291 and engineering standing

Proposed prerequisites:
 MNG 211, MNG 291, MNG 332, and engineering standing

14. Current Bulletin description:
 Students will undertake a design project consisting of reserve analysis of a given mine property. They will calculate minable reserves and analyze mining and quality properties of coal. Each student will write a report supported by maps and will present it orally before a group of peers and invited experts. Lecture, one hour; laboratory, one hour per week.

Proposed Bulletin description:
 First course of a two-part capstone design project. Emphasis is on ore reserve evaluation, development of a preliminary mine plan, design of auxiliary processes, teamwork, and oral and written communication. Movable reserves will be quantified and quality distribution assessed. An appropriate mining technique will be identified and implemented into a proposed mine design. Lecture, one hour; laboratory, three hours per week.

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 YES, list below the programs that require this course:
 Mining Engineering. This course change is part of a program change in mining engineering.

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† 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

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: Joseph Sottile Phone: 257-4616 Email: jsottile@engr.uky.edu

22. Signatures to report approvals:

<p style="text-align: center;"><u>11-11-08</u> DATE of Approval by Department Faculty</p>	<p style="text-align: center;"><u>Rick Honaker</u> <small>printed name</small></p>	<p style="text-align: center;"><u>Rick Honaker</u> Reported by Department Chair</p>
<p style="text-align: center;"><u>11-20-09</u> DATE of Approval by College Faculty</p>	<p style="text-align: center;"><u>RICHARD J. SWEIGARD</u> <small>printed name</small></p>	<p style="text-align: center;"><u>Richard J. Sweigard</u> Reported by College Dean</p>
<p style="text-align: center;"><u>1-19-2010</u> *DATE of Approval by Undergraduate Council</p>	<p style="text-align: center;"><u>S Gill</u> <small>printed name</small></p>	<p style="text-align: center;"><u>S Gill</u> Reported by Undergraduate Council Chair</p>
<p style="text-align: center;">*DATE of Approval by Graduate Council</p>	<p style="text-align: center;">/</p>	<p style="text-align: center;">Reported by Graduate Council Chair</p>
<p style="text-align: center;">*DATE of Approval by Health Care Colleges Council (HCCC)</p>	<p style="text-align: center;">/</p>	<p style="text-align: center;">Reported by Health Care Colleges Council Chair</p>
<p style="text-align: center;">*DATE of Approval by Senate Council</p>	<p style="text-align: center;">/</p>	<p style="text-align: center;">Reported by Office of the Senate Council</p>
<p style="text-align: center;">*DATE of Approval by the University Senate</p>	<p style="text-align: center;">/</p>	<p style="text-align: center;">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 – MNG 591

Syllabus

Department of Mining Engineering
University of Kentucky

MNG 591: Mine Design Project I

2 Credit Hours
1 hour lecture, 3 hours laboratory

Instructor: Kot Unrug
Office: Room 234G MMRB
Phone: 257-1883
E-mail: kotunrug@engr.uky.edu

Course Description: First course of a two-part capstone design project. Emphasis is on ore reserve evaluation, development of a preliminary mine plan, design of auxiliary processes, teamwork, and oral and written communication. Movable reserves will be quantified and quality distribution assessed. An appropriate mining technique will be identified and implemented into a proposed mine design. Lecture, one hour; laboratory, three hours per week. Prereq: MNG 211, MNG 291, MNG 332, and Engineering Standing.

Prerequisites: MNG 211, MNG 291, MNG 332, and engineering standing.

Course Topics: Lectures will be provided by the instructor and guest lecturers who are specialists in various areas

1. Project Management Introduction (Teamwork)
2. Mineral Reserve Modeling Software (Guest Lecture)
3. Geologic Modeling (Guest Lecture)
4. Reserve Calculations
 - a. Tonnage
 - b. Overall Quality and Quality Distribution
 - c. Isopach Mapping
5. Preliminary Mine Planning (Guest Lecture)
 - a. Mapping
 - b. Unit Operations
 - c. Production Planning
6. Auxiliary Processes
 - a. Ground Control Planning and Permits
 - b. Ventilation Planning and Permits
 - c. Refuse Disposal Planning and Permits
 - d. Surface Facilities (Guest Lecture)

Proposed Syllabus – MNG 591

Learning Outcomes: (Undergraduate and Graduate Students)

Outcome	Program Outcome	Assessment Tool
1. Demonstrated ability to evaluate ore reserves	(d)	Component Report, Final Report, Presentation
2. Demonstrated ability to develop a mine plan for a given reserve based on geologic constraints, industrial standards, regulations and modern technologies	(a), (c), (e), (j), (k)	Component Report, Final Report, Presentation
3. Understanding of the relationships between multiple design factors (e.g., most economical design versus regulatory constraints)	(f), (k)	Component Report, Final Report, Presentation
4. Demonstrated ability to work in a team environment	(d)	Team Structure & Meeting Plan, Timely submission of Component Reports, Final Team Report
5. Demonstrated ability to develop a written report and present findings orally to a group of peers and industry experts.	(g)	Component Report, Final Report, Presentation
6. (Graduate Students Only) Demonstrated ability to apply optimization methods to assist in mine design selection.		Component Report, Final Report, Presentation

Grading Policy:

	Undergraduate Students	Graduate Students
Report Components	25%	20%
Final Project Report	50%	45%
Project Presentation	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