

EGR 505: MANAGERIAL FINANCE FOR ENGINEERS

In Workflow

1. 14EH GR Director of Curriculum (mdevets@ncsu.edu)
2. 14EH Grad Head (14EH Grad Head@ncsu.edu)
3. COE CC Coordinator GR (rfillin@ncsu.edu)
4. COE CC Chair GR (reeves@ncsu.edu; rfillin@ncsu.edu; mdevets@ncsu.edu)
5. COE Final Review GR (rfillin@ncsu.edu)
6. COE Dean GR (reeves@csc.ncsu.edu)
7. ABGS Coordinator (george_hodge@ncsu.edu; lian_lynch@ncsu.edu; mlnosbis@ncsu.edu)
8. ABGS Meeting (george_hodge@ncsu.edu; lian_lynch@ncsu.edu; mlnosbis@ncsu.edu)
9. ABGS Chair (george_hodge@ncsu.edu; lian_lynch@ncsu.edu; mlnosbis@ncsu.edu)
10. Grad Final Review (george_hodge@ncsu.edu; lian_lynch@ncsu.edu; mlnosbis@ncsu.edu)
11. PeopleSoft (ldmihalo@ncsu.edu; blpearso@ncsu.edu; Charles_Cliff@ncsu.edu; jmharr19@ncsu.edu; Tracey_Ennis@ncsu.edu)

Approval Path

1. Tue, 07 Jul 2015 16:58:56 GMT
Mihail Devetsikiotis (mdevets): Approved for 14EH GR Director of Curriculum
2. Mon, 24 Aug 2015 20:20:25 GMT
Melissa Nosbisch (mlnosbis): Approved for 14EH Grad Head
3. Wed, 06 Jan 2016 20:34:22 GMT
Robyn Fillingier (rfillin): Approved for COE CC Coordinator GR
4. Thu, 07 Jan 2016 17:11:28 GMT
Robyn Fillingier (rfillin): Approved for COE CC Chair GR
5. Thu, 07 Jan 2016 17:31:31 GMT
Robyn Fillingier (rfillin): Approved for COE Final Review GR
6. Fri, 15 Jan 2016 17:10:24 GMT
Douglas Reeves (reeves): Approved for COE Dean GR
7. Tue, 19 Jan 2016 19:15:34 GMT
George Hodge (george_hodge): Approved for ABGS Coordinator
8. Mon, 08 Feb 2016 16:47:01 GMT
George Hodge (george_hodge): Approved for ABGS Meeting

New Course Proposal

Date Submitted: Thu, 28 May 2015 19:19:02 GMT

Viewing: EGR 505 : MANAGERIAL FINANCE FOR ENGINEERS

Changes proposed by: mefeinst

Course Prefix

EGR (EGR-Engineering Master's)

Course Number

505

Dual-Level Course

No

Cross-listed Course

No

Title

MANAGERIAL FINANCE FOR ENGINEERS

Abbreviated Title

MGRL FIN ENGNRS

College

College of Engineering

Academic Org Code

College of Engineering (14EH)

CIP Discipline Specialty Number

14.0101

CIP Discipline Specialty Title

Engineering, General.

Term Offering

Fall and Spring

Year Offering

Offered Every Year

Effective Date

Fall 2016

Previously taught as Special Topics?

Yes

Number of Offerings within the past 5 years

4

Course Prefix/Number

EGR 590-605

EGR 590-605

EGR 590-605

EGR 590-605

Semester/Term Offered

Fall 13

Spring 14

Fall 14

Spring 15

Enrollment

20

20

20

28

Course Delivery

Online (Internet)

Grading Method

Graded/Audit

Credit Hours

3

Course Length

16

weeks

**Contact Hours
(Per Week)**

Component Type

Lecture

Contact Hours

3

Course Is Repeatable for Credit

No

Instructor Name

MYRON FEINSTEIN

Instructor Title

Lecturer

Grad Faculty Status

Assoc

DELTA/Online Enrollment:

Open when course_delivery = distance OR course_delivery = online OR course_delivery = remote

Delivery Format	Per Semester	Per Section	Multiple Sections?	Comments
LEC	40	20	Yes	NA

Course Prerequisites, Corequisites, and Restrictive Statement

An engineering, technical or scientific undergraduate degree is required.

Is the course required or an elective for a Curriculum?

No

Catalog Description

In the current business environment, familiarity with and appreciation of finance is essential to career success. Technically competent managers must be able to speak the common language of business and to understand how their work affects the performance of their organization. The objective of this course is to provide practitioners in technical fields the financial know-how to plan, control and make decisions that achieve organizational performance excellence. The class includes both individual and collaborative (team) learning.

Justification for new course:

This graduate course has covered the above elements since 2013 and has been very well received. Most undergraduate engineering students have never had the opportunity to understand how their work affects the financial results of their organization. Many students who have taken this course stated that the course content should be part of any engineering education; because an understanding of Managerial Finance is vital as they try to advance their careers.

Does this course have a fee?

No

Consultation

College(s)

Poole College of Management

Contact Name

Dr. Steve Allen

Statement Summary

After consulting with PCOM's executive team and relevant faculty, our college is willing to endorse the course action proposals for EGR 501, 503, 505, and 507. There is some overlap with courses we teach in our college, but either we lack space to accommodate Master of Engineering students or our courses lack the applications context that engineering students would expect.

Looking forward, PCOM expects to be notified when new EGR courses with management content are being conceptualized. The online MBA program is growing and new courses are being developed to meet the needs of these students. We also expect to have the opportunity to engage with the College of Engineering should there ever be a discussion about a Master of Engineering Management degree.

Best regards,

Steve

Steven Allen
Associate Dean for Graduate Programs and
Research
Poole College of Management
NC State University
Raleigh NC 27695-7229
(919) 515-6941 office

Instructional Resources Statement

There are no additional instructional resources required. I have taught this course four times as part of my normal teaching load.

Course Objectives/Goals

This course is designed to prepare students to move into managerial positions in an engineering or scientific work environment and to use managerial finance for planning, control and decision making.

Student Learning Outcomes

Upon completion of this course students will be able to:

-
- prepare and analyze financial statements
-
- prepare budgets and analyze budget variances
-
- distinguish relevant and irrelevant costs to enable decisions such as make-or-buy
-
- determine Return on Investment and create and evaluate capital expenditure proposals
-
- improve their ability to gain approval for new programs and business opportunities
-
- apply financial analysis and techniques to improve operational performance in engineering and manufacturing
-

Student Evaluation Methods

Evaluation Method	Weighting/Points for Each	Details
Multiple exams	50%	3 exams covering the course content.
Homework	50%	8 Individual problem sets covering chapters in the text (32%) 3 Team problem sets covering chapters in the text (18%)

Topical Outline/Course Schedule

Topic	Time Devoted to Each Topic	Activity
Basic Accounting & Financial Statements	3 weeks	Textbook readings, journal articles, Powerpoint lectures and videos; problem solving.
Analysis of Financial Ratios	1 week	Textbook readings, journal articles, Powerpoint lectures and videos; problem solving.
Managerial Accounting	8 weeks	Textbook readings, journal articles, Powerpoint lectures and videos; problem solving.
Cost of Capital, Working Capital Management, Rates of Return	2 weeks	Textbook readings, journal articles, Powerpoint lectures and videos; problem solving.
Capital Budgeting	1 week	Textbook readings, journal articles, Powerpoint lectures and videos; problem solving.

Syllabus

EGR590_605_Syllabus_2015.pdf

Additional Documentation

Additional Comments

The content of this course is crucial to promotions and career success for technical professionals. Linda Krute, Director of EOL, should be contacted for additional support for the value of this course.

mInosbis 1/19/2016: Overlap with PCOM, but consultation notes are provided above. Note that Myron Feinstein is not a member of the graduate faculty, but is an approved non-graduate faculty instructor for this course.

ghodge 1/19/2016 : Ready for ABGS reviewers.

ABGS Reviewer Comments:

-no comments

ghodge 2/6/2016 Send to ABGS

Course Reviewer Comments

rfillin (Mon, 09 Nov 2015 15:00:39 GMT): Myron course EGR 501 and 505 can not have the same catalog description. You will need you to update the description for each plus complete the consultation. Consultation, this s to ensure that there was a consultation with any relevant department, the title has the word 'Management", hence we need consultation with College of Management. Please consult with their director of Graduate Programs that they don't have a conflict with your course. An email response from their DGP would be sufficient.

Key: 7305