Cover Sheet: Request 12041

EIN 4354 Engineering Economy

Info	
Process	Course Modify Ugrad/Pro
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	Serdar Kirli kirli@ise.ufl.edu
Created	11/8/2017 4:17:21 PM
Updated	12/10/2018 1:54:24 PM
Description of	This request is only about changing the first digit of the course number from 4 to 3, making this a
request	3000-level course. Everything else (content, contact hours, pre-requisites) will remain unchanged.

Step	Status	Group	User	Comment	Updated
Department	Approved	ENG - Industrial and Systems Engineering 011906000	Ageliki Elefteriadou		12/7/2017
No document	changes		•		
College	Recycled	ENG - College of Engineering	Heidi Dublin	Description request should describe the change requested. Please include syllabus. Since this is a service course, please consult with other majors that may be affected.	1/8/2018
No document	changes		-		-
Department	Approved	ENG - Industrial and Systems Engineering 011906000	Ageliki Elefteriadou		5/3/2018
No document	changes				
College	Recycled	ENG - College of Engineering	Heidi Dublin	Please ensure consult was done.	8/30/2018
No document			-		-
Department	Approved	ENG - Industrial and Systems Engineering 011906000	Serdar Kirli	e-mail exchange for the consultation with MSE uploaded	9/27/2018
Course Numb	er change for	EIN4354.txt	•		9/27/2018
College	Approved	ENG - College of Engineering	Heidi Dublin	Approved by HWCOE Curriculum Committee	10/2/2018
No document					
University Curriculum Committee	Commented	PV - University Curriculum Committee (UCC)	Lee Morrison	Added to November agenda.	10/23/2018
No document					
University Curriculum Committee	Recycled	PV - University Curriculum Committee (UCC)	Casey Griffith	Please contact Office of the Associate Provost of Undergraduate Affairs regarding requested changes.	11/27/2018
No document	changes	· · ·			
College	Recycled	ENG - College of Engineering	Heidi Dublin	Please see comments.	11/27/2018
	changes				

Step	Status	Group	User	Comment	Updated
Department	Approved	ENG - Industrial and Systems Engineering 011906000	Serdar Kirli	Comments from UCC addressed.	12/7/2018
EIN4354_Eng	ineeringEcon				11/28/2018
College	Approved	ENG - College of Engineering	Heidi Dublin	Department indicates that concerns were addressed.	12/10/2018
No document	changes				
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			12/10/2018
No document	changes		-		
Statewide Course Numbering System					
No document	changes				
Office of the Registrar					
No document	changes				
Student Academic Support System					
No document	changes				
Catalog No document College	changes				
Notified No document	changes				

Course|Modify for request 12041

Info

Request: EIN 4354 Engineering Economy Description of request: This request is only about changing the first digit of the course number from 4 to 3, making this a 3000-level course. Everything else (content, contact hours, pre-requisites) will remain unchanged. Submitter: Serdar Kirli kirli@ise.ufl.edu Created: 12/7/2018 9:51:31 AM Form version: 2

Responses

Current Prefix EIN Course Level 4 Number 354 Lab Code None Course Title Engineering Economy Effective Term Earliest Available Effective Year 2018 Requested Action Other (selecting this option opens additional form fields below) Change Course Prefix? No

Change Course Level? Yes Current Level 4 Proposed Level 3 Change Course Number? No

Change Lab Code? No

Change Course Title? No

Change Transcript Title? No

Change Credit Hours? No

Change Variable Credit? No

Change S/U Only? No

Change Contact Type? No

Change Rotating Topic Designation? No

Change Repeatable Credit? No

Change Course Description? No

Change Prerequisites? No

Change Co-requisites? No

Rationale This is a junior-level course in the ISE curriculum which is located in the 5th semester in the current 8-semester plan in the undergraduate catalog, though it can be taken as early as the 3rd semester, since its only pre-requisite is MAC2312 (Calculus 2). Therefore, it is more appropriate to designate this course as a 3000-level course. So, this request is simply an effort to make the first digit consistent with the course's placement the undergraduate catalog.

This change does not affect the curriculum at all. The pre-requisite structure will be unaffected and course content will not be modified.

From: Hennig, Richard

Sent: Thursday, September 27, 2018 2:58 PM

To: Kirli,Serdar

Cc: Manuel, Michele; Schubring, DuWayne; MECHOLSKY, JOHN JOSEPH, JR

Subject:Fwd: RE: Re: Course Number change for EIN4354

Dear Serdar,

I checked with our academic advisor, Courtney Grasley, and EIN 4354 is not a pre- or co-requisite of any of our MSE courses (see also Courtney's message below).

Please let me know if there is anything else that is needed for this course number change from us.

Best wishes,

Richard

—

Richard G. Hennig

Professor, Materials Science and Engineering, University of Florida Associate Director, Quantum Theory Project, University of Florida Adjunct Professor, Materials Science and Engineering, Cornell University Email: rhennig@ufl.edu Web: http://hennig.mse.ufl.edu

On September 6, 2018 at 11:11:06 AM, Grasley, Courtney L (cgrasley@mse.ufl.edu) wrote: Good Morning Dr. Hennig,

EIN4354 is not listed as a pre- or co-requisit for any of our MSE undergraduate courses. EIN4354 falls under the "Engineering Core Courses" section of the degree audit and can be substituted with MAN3025 and MAR3023 (both of these courses have pre-reqs of other economics and marketing courses.) Please let me know if you have any other questions!

Best Regards,

Courtney

Courtney Grasley, MSM Academic Advisor II Academic Services Materials Science and Engineering | Nuclear Engineering PO Box 116400 | 108 Rhines Hall

From: Hennig, Richard Sent: Thursday, September 06, 2018 11:01 AM To: . MSE Advising <advising@mse.ufl.edu> Subject: Fwd: Re: Course Number change for EIN4354

Dear Courtney,

Are you aware of any of our courses listing EIN4354 as a pre- or co-requisit? The course number for this class is about to change from 4354 to 3354 and we should identify if we need to adjust any of our syllabi etc.

Thanks for your help and best wishes, Richard Richard G. Hennig

Professor, Materials Science and Engineering, University of Florida Associate Director, Quantum Theory Project, University of Florida Adjunct Professor, Materials Science and Engineering, Cornell University Email: rhennig@ufl.edu Web: http://hennig.mse.ufl.edu

On September 5, 2018 at 9:18:40 PM, Manuel, Michele (mmanuel@mse.ufl.edu)

wrote:

Richard,

Could you work with the curriculum committee to look at all the

downstream effects of this change?

Thank you,

Michele

From: "Kirli,Serdar" <kirli@ise.ufl.edu> Date: Wednesday, September 5, 2018 at 4:57 PM To: "Manuel, Michele" <mmanuel@mse.ufl.edu> Cc: "Hennig, Richard" <rhennig@ufl.edu>, "MECHOLSKY,JOHN JOSEPH,JR" <jmech@mse.ufl.edu>, "Schubring, DuWayne" <dlschubring@ufl.edu> Subject: RE: Course Number change for EIN4354

We are aiming for 2019.

From: Manuel, Michele Sent: Wednesday, September 05, 2018 4:48 PM

_

To: Kirli,Serdar <kirli@ise.ufl.edu> Cc: Hennig, Richard <rhennig@ufl.edu>; MECHOLSKY,JOHN JOSEPH,JR <jmech@mse.ufl.edu>; Schubring, DuWayne <dlschubring@ufl.edu> Subject: Re: Course Number change for EIN4354

Dear Serdar,

Thank you for reaching out to us. Could you tell me which catalog year this will be reflected in? Best, Michele

Michele V. Manuel, Ph.D., FASM Rolf E. Hummel Professor of Electronic Materials and Chair Department of Materials Science and Engineering Nuclear Engineering Program Herbert Wertheim College of Engineering University of Florida 100 Rhines Hall, 549 Gale Lemerand Drive Gainesville, Florida 32611-6400 Phone: 352.846.3780 Fax: 352.392.7219 Department: www.mse.ufl.edu Research: www.materialsdesigngroup.com

From: "Kirli,Serdar" <kirli@ise.ufl.edu> Date: Wednesday, September 5, 2018 at 3:50 PM To: "Manuel, Michele" <mmanuel@mse.ufl.edu> Cc: "Hennig, Richard" <rhennig@ufl.edu> Subject: Course Number change for EIN4354

Dr. Manuel,

I am the undergraduate coordinator in Industrial and Systems Engineering. Our department has recently voted to change the course number for Engineering Economy from EIN4354 to EIN3354 to better reflect the fact that it is a junior level course. I am writing to inform you of this change and request your input, since this is a required course in your curriculum. Please let me know if this change would have any negative impact on your students or department.

Sincerely

Serdar Kirli, Ph.D. Master Lecturer & Undergraduate Coordinator Industrial and Systems Engineering Herbert Wertheim College of Engineering University of Florida

Engineering Economy EIN 4354 Sections 2605 *Academic Term:* Spring 2018

Instructor:

Stan Uryasev Email Address: uryasev@ufl.edu Phone Number: 352-213-3457 Office Hours: TBD

Teaching Assistant:

George Partaia Email Address: Pertaia@ufl.edu Office Hours: TBD

Course Description

3 credits. Basic principles and applications of economic decision-making between alternatives encountered in engineering systems projects. Analysis includes methodologies of economics and finance in addition to engineering fundamentals.

Course Pre-Requisites / Co-Requisites

Pre-Requisites: MAC 2312 (Analytic Geometry and Calculus II), with a minimum grade of C.

Course Objectives Upon completion, students should be able to do the following:

- 1. Understand the meaning of the "time value of money", inflation, deflation, exchange rates, and interest and their application to economic analysis
- 2. Understand and apply the steps of the economic decision-making process, including defining a problem, generating solution alternatives, estimating cash flows, analysis, selection, implementation and post-implementation analysis,
- 3. Be able to financially describe investment alternatives with cash flows and cash flow diagrams
- 4. Be able to estimate before tax cash flows and convert them into after-tax cash flows under the assumption of current U.S. tax law
- 5. Understand the concept of economic equivalence for the basis of comparing mutually exclusive alternatives

Materials and Supply Fees

N/A

Professional Component (ABET)

1. Can become successful professionals in industrial and systems engineering or other disciplines.

2. Can acquire advanced knowledge through continuing education or advanced degree programs.

Relation to Program Outcomes (ABET):

Outcome	Coverage
a. Apply knowledge	Medium
b. Conduct experiments	
c. Design	
d. Function on teams	
e. Solve problems	High
f. Professional and ethical responsibility	Medium
g. Communicate	Low
h. Economic impact	High
i. Lifelong learning	
j. Contemporary issues	
k. Techniques, skills, and tools for degree program	High

Required Textbooks

- Course Notes are available for free downloading at Canvas site: M. Zabarankin and S. Uryasev, Course Notes: Engineering Economy, 2015.
- G. Newnan, J.P. Lavelle and T.G. Eschenbach, Engineering Economic Analysis, Oxford University Press, 2013, 12th edition. ISBN: 0199339279 (or G. Newnan, J.P. Lavelle and T.G. Eschenbach, Engineering Economic Analysis, Oxford University Press, 2017, 13th edition. ISBN: 978-0190296902).

Course Format

This is an online delivery course. Lecture notes, assignments, practice exercises, and extra information are all going to be available to you on the class website at CANVAS. The assignment submission system can be reached at the tab Assignments.

Course Schedule

The course Schedule is offered as a guide. This means that it is subject to change, depending on the pace of the class. The instructor might choose to cover parts of the curriculum more extensively, or give extensions to deadlines. The dates of the exams might be subject to change depending on the progress of the class.

Week	Modules	Quiz/Exam	
1	General introduction	Q0, Q1	
2	Estimating costs and benefits	Q2.1, Q2.2	
3	Interest and equivalence	Q3.1, Q3.2, Q3.3, HW1	
4	Net present value analysis		
5	Net present value analysis (Cont'd)	Q4.1, Q4.2	
6	Internal rate of return analysis		
7	Internal rate of return analysis (Cont'd)	Q5, HW2	
8	Annual percentage rate		
9	Annual percentage rate (Cont'd)	Q6, Midterm Exam	
10	Depreciation		
11	Depreciation (Cont'd)	07, HW3	
12	Income taxes		
13	Income taxes (Cont'd)	Income taxes	
14	Inflation and price change	Q9	
15	Inflation and price change (Cont'd)	HW4	
16		Final Exam	

Attendance Policy

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

It is your responsibility to keep up with the class updates (material to be taught, quizzes, exams, etc.).

Under no circumstances students should expect an arrangement that will not require their physical presence to exams.

Homework Assignments & Quizzes

All homework assignments & quizzes must be submitted via the Course's website in the specified system unless specified otherwise. Submission of links to outside or cloud files does not constitute submission.

Assignment & quiz deadlines are rigid. If you submit during 24 hours after the deadline, you will receive 50% of the grade for this assignment. Submissions after 24 hours will not be considered. Lowest grades of two online quizzes will be dropped. Make-up of online quizzes will not be allowed. Lowest grade of one homework will be dropped. Any delays in taking the midterm and the final exam must be arranged with the instructor prior to the absence.

Evaluation of Grades

Assignment	Percentage of Final Grade
Four homeworks (the lowest one will be dropped)	30% (equal weight)
In-class midterm exam	25%
Fourteen online quizzes (the lowest two will be	
dropped)	20% (equal weight)
Final in-class exam	25%
Total	100%

Grading Policy

Grade	Percent
А	>=93
A-	[90, 93]
B+	[87, 90]
В	[83, 87]
В-	[80, 83]
C+	[77, 80]
С	[73, 77]
C-	[70, 73]
D+	[67, 70]
D	[63, 67]
D-	[60, 63]
E (F)	<60

In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). This scale is tentative and will be adapted to the class performance. However, grade limits will not increase. For example, a 91% score at the end of the semester may transform either into scale corresponding A- grade, or to a higher (A) grade.

Note: a C- average is equivalent to a GPA of 1.67, and therefore, it does not satisfy graduation requirement. For more information on grades and grading policies, please visit:

<u>http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html</u> and https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx.

Re-grading Policy

Any grade issues should be brought to the attention of the instructor within 10 days after posting the grades.

Students Requiring Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352- 392-8565, <u>https://www.dso.ufl.edu/drc</u>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Course Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <u>https://evaluations.ufl.edu/evals.</u> Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <u>https://evaluations.ufl.edu/results/</u>.

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (<u>https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/</u>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: <u>http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html</u>

Campus Resources:

Health and Wellness

U Matter, We Care:

If you or a friend is in distress, please contact <u>umatter@ufl.edu</u> or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: <u>http://www.counseling.ufl.edu/cwc,</u> **and** 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or http://www.police.ufl.edu/.

E-learning technical suppor*t*, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <u>https://lss.at.ufl.edu/help.shtml</u>.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. <u>https://www.crc.ufl.edu/.</u>

Library Support, <u>http://cms.uflib.ufl.edu/ask.</u> **Various** ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <u>https://teachingcenter.ufl.edu/</u>.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. <u>https://writing.ufl.edu/writing-studio/</u>.

Student Complaints Campus: <u>https://www.dso.ufl.edu/documents/UF Complaints policy.pdf.</u>

On-Line Students Complaints: <u>http://www.distance.ufl.edu/student-complaint-process.</u>