

PURDUE UNIVERSITY  
REQUEST FOR ADDITION, EXPIRATION,  
OR REVISION OF AN UNDERGRADUATE COURSE  
(100-400 LEVEL)

EFD 30-11

DEPARTMENT Mechanical Engineering EFFECTIVE SESSION Summer Spring 2011

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

<input type="checkbox"/> 1. New course with supporting documents	<input type="checkbox"/> 7. Change in course attributes (department head signature only)
<input type="checkbox"/> 2. Add existing course offered at another campus	<input type="checkbox"/> 8. Change in instructional hours
<input type="checkbox"/> 3. Expiration of a course	<input type="checkbox"/> 9. Change in course description
<input type="checkbox"/> 4. Change in course number	<input checked="" type="checkbox"/> 10. Change in course requisites
<input type="checkbox"/> 5. Change in course title	<input type="checkbox"/> 11. Change in semesters offered (department head signature only)
<input type="checkbox"/> 6. Change in course credit/type	<input type="checkbox"/> 12. Transfer from one department to another

PROPOSED: Subject Abbreviation <input type="text"/>	EXISTING: Subject Abbreviation <u>ME</u>	TERMS OFFERED Check All That Apply: <input checked="" type="checkbox"/> Summer <input checked="" type="checkbox"/> Fall <input checked="" type="checkbox"/> Spring
Course Number <input type="text"/>	Course Number <u>27000</u>	
Long Title <u>Basic Mechanics I</u>	CAMPUS(ES) INVOLVED	
Short Title <u>Basic Mechanics I</u>	<input type="checkbox"/> Calumet <input type="checkbox"/> N. Central <input type="checkbox"/> Cont Ed <input type="checkbox"/> Tech Statewide <input type="checkbox"/> Ft. Wayne <input checked="" type="checkbox"/> W. Lafayette <input type="checkbox"/> Indianapolis	

Abbreviated title will be entered by the Office of the Registrar if omitted. (22 CHARACTERS ONLY)

CREDIT TYPE		COURSE ATTRIBUTES: Check All That Apply	
1. Fixed Credit: Cr. Hrs. <u>3</u>	2. Variable Credit Range: <input type="text"/>	1. Pass/Not Pass Only <input type="checkbox"/>	7. Registration Approval Type <input type="checkbox"/>
Minimum Cr. Hrs. <input type="text"/>	To <input type="checkbox"/> Or <input type="checkbox"/>	2. Satisfactory/Unsatisfactory Only <input type="checkbox"/>	Department <input type="checkbox"/>
Maximum Cr. Hrs. <input type="text"/>		3. Repeatable <input type="checkbox"/>	Instructor <input type="checkbox"/>
3. Equivalent Credit: Yes <input type="checkbox"/> No <input type="checkbox"/>		Maximum Repeatable Credit: <input type="text"/>	8. Variable Title <input type="checkbox"/>
4. Thesis Credit: Yes <input type="checkbox"/> No <input type="checkbox"/>		4. Credit by Examination <input type="checkbox"/>	9. Remedial <input type="checkbox"/>
		5. Designator Required <input type="checkbox"/>	10. Honors <input type="checkbox"/>
		6. Special Fees <input type="checkbox"/>	11. Full Time Privilege <input type="checkbox"/>
			12. Off Campus Experience <input type="checkbox"/>

Instructional Type	Minutes Per Mtg	Meetings Per Week	Weeks Offered	% of Credit Allocated	Delivery Method (Asyn. Or Syn.)	Delivery Medium (Audio, Internet, Live, Text-Based, Video)	Cross-Listed Courses
Lecture	50	3	15		Syn	Live	
Recitation							
Presentation							
atory							
rep							
Studio							
Distance							
Clinic							
Experiential							
Research							
Ind. Study							
Pract/Observ							

COURSE DESCRIPTION (INCLUDE REQUISITES):  
**ME 27000 Basic Mechanics I**  
 Sem. 1 and 2 SS. Class 3, cr. 3.  
 Prerequisite: PHYS 17200 & MA 16600 or equivalent. Concurrent Prerequisite: MA 26100 & ENGR 13200  
 Fundamental concepts of mechanics: vector operations, force and couples, free body diagrams, equilibrium of a particle and of rigid bodies. Friction. Distributed forces. Centers of gravity and centroids. First & second moments of areas, lines and volumes. Applications from structural and machine elements such as bars, trusses, and friction devices. Kinematics and equations of motion of a particle for rectilinear and curvilinear motion.

Calumet Department Head	Date	Calumet School Dean	Date
Fort Wayne Department Head	Date	Fort Wayne School Dean	Date
Indianapolis Department Head	Date	Indianapolis School Dean	Date
North Central Department Head	Date	North Central Chancellor	Date
<i>James D. Jones</i>	11/23	<i>Michael J. ...</i>	2/11/11
West Lafayette Department Head	Date	West Lafayette College/School Dean	Date
		West Lafayette Registrar	Date
		<i>Sandra Schaffer</i>	2/27/11

2/22/11



**PURDUE UNIVERSITY**  
REQUEST FOR ADDITION, EXPIRATION,  
OR REVISION OF AN UNDERGRADUATE COURSE  
(100-400 LEVEL)

*EFD 30-11*

DEPARTMENT Mechanical Engineering EFFECTIVE SESSION Spring 2011

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

- |   |   |
|---|---|
| <input type="checkbox"/> 1. New course with supporting documents          | <input type="checkbox"/> 7. Change in course attributes (department head signature only)  |
| <input type="checkbox"/> 2. Add existing course offered at another campus | <input type="checkbox"/> 8. Change in instructional hours                                 |
| <input type="checkbox"/> 3. Expiration of a course                        | <input type="checkbox"/> 9. Change in course description                                  |
| <input type="checkbox"/> 4. Change in course number                       | <input checked="" type="checkbox"/> 10. Change in course requisites                       |
| <input type="checkbox"/> 5. Change in course title                        | <input type="checkbox"/> 11. Change in semesters offered (department head signature only) |
| <input type="checkbox"/> 6. Change in course credit/type                  | <input type="checkbox"/> 12. Transfer from one department to another                      |

<b>PROPOSED:</b> Subject Abbreviation <input type="text"/>	<b>EXISTING:</b> Subject Abbreviation <u>ME</u>	<b>TERMS OFFERED</b> Check All That Apply: <input checked="" type="checkbox"/> Summer <input checked="" type="checkbox"/> Fall <input checked="" type="checkbox"/> Spring
Course Number <input type="text"/>	Course Number <u>27000</u>	
Long Title <u>Basic Mechanics I</u>	<b>CAMPUS(ES) INVOLVED</b>	
Short Title <u>Basic Mechanics I</u>	<input type="checkbox"/> Calumet <input type="checkbox"/> N. Central <input type="checkbox"/> Cont Ed <input type="checkbox"/> Tech Statewide <input type="checkbox"/> Ft. Wayne <input checked="" type="checkbox"/> W. Lafayette <input type="checkbox"/> Indianapolis	

Abbreviated title will be entered by the Office of the Registrar if omitted. (22 CHARACTERS ONLY)

<b>CREDIT TYPE</b>	<b>COURSE ATTRIBUTES: Check All That Apply</b>
1. Fixed Credit: Cr. Hrs. <u>3</u>	1. Pass/Not Pass Only <input type="checkbox"/>
2. Variable Credit Range: <input type="text"/>	2. Satisfactory/Unsatisfactory Only <input type="checkbox"/>
Minimum Cr. Hrs. <input type="text"/>	3. Repeatable <input type="checkbox"/>
(Check One) To <input type="checkbox"/> Or <input type="checkbox"/>	Maximum Repeatable Credit: <input type="text"/>
Maximum Cr. Hrs. <input type="text"/>	4. Credit by Examination <input type="checkbox"/>
3. Equivalent Credit: Yes <input type="checkbox"/> No <input type="checkbox"/>	5. Designator Required <input type="checkbox"/>
4. Thesis Credit: Yes <input type="checkbox"/> No <input type="checkbox"/>	6. Special Fees <input type="checkbox"/>
	7. Registration Approval Type <input type="checkbox"/>
	Department <input type="checkbox"/> Instructor <input type="checkbox"/>
	8. Variable Title <input type="checkbox"/>
	9. Remedial <input type="checkbox"/>
	10. Honors <input type="checkbox"/>
	11. Full Time Privilege <input type="checkbox"/>
	12. Off Campus Experience <input type="checkbox"/>

Instructional Type	Minutes Per Mtg	Meetings Per Week	Weeks Offered	% of Credit Allocated	Delivery Method (Asyn. Or Syn.)	Delivery Medium (Audio, Internet, Live, Text-Based, Video)	Cross-Listed Courses
Lecture	50	3	15		Syn	Live	
Recitation							
Simulation							
Laboratory							
Lab Prep							
Studio							
Distance							
Clinic							
Experiential							
Research							
Ind. Study							
Pract/Observ							

**COURSE DESCRIPTION (INCLUDE REQUISITES):**  
**ME 27000 Basic Mechanics I**  
 Sem. 1 and 2 SS. Class 3, cr. 3.  
 Prerequisite: PHYS 17200 & MA 16600 or equivalent. Concurrent Prerequisite: MA 26100 & ENGR 13200  
 Fundamental concepts of mechanics: vector operations, force and couples, free body diagrams, equilibrium of a particle and of rigid bodies. Friction. Distributed forces. Centers of gravity and centroids. First & second moments of areas, lines and volumes. Applications from structural and machine elements such as bars, trusses, and friction devices. Kinematics and equations of motion of a particle for rectilinear and curvilinear motion.

Calumet Department Head	Date	Calumet School Dean	Date
Fort Wayne Department Head	Date	Fort Wayne School Dean	Date
Indianapolis Department Head	Date	Indianapolis School Dean	Date
North Central Department Head	Date	North Central Chancellor	Date
<i>James D. Jones</i>	11/23/10	<i>Michael J. Harris</i>	2/16/11
West Lafayette Department Head	Date	West Lafayette College/School Dean	Date
		West Lafayette Registrar	Date



**TO:** The Engineering Faculty  
**FROM:** The Faculty of the School of Mechanical Engineering  
**RE:** ME 27000 Prerequisite Changes

The Faculty of the School of Mechanical Engineering has approved the following prerequisite change. This action is now submitted to the Engineering Faculty with a recommendation for approval.

**From:**

**ME 27000 Basic Mechanics I**

Sem. 1, 2, & 3 Class 3, cr. 3

Prerequisite: PHYS 17200-Modern Mechanics

Concurrent Prerequisite: MA 26100-Multivariate Calculus

Fundamental concepts of mechanics: vector operations, force and couples, free body diagrams, equilibrium of a particle and of rigid bodies. Friction. Distributed forces. Centers of gravity and centroids. First and second moments of areas, lines and volumes. Applications from structural and machine elements such as bars, trusses and friction devices. Kinetics and equations of motion of a particle for rectilinear and curvilinear motion.

**To:**

**ME 27000 Basic Mechanics I**

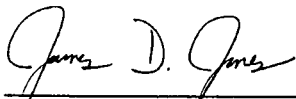
Sem. 1, 2, & 3 Class 3, cr. 3

Prerequisite: PHYS 17200-Modern Mechanics and MA 16600-Analytical Geometry & Calculus II or equivalent

Concurrent Prerequisite: MA 26100-Multivariate Calculus and ENGR 13200-Transforming Ideas to Innovation II

Fundamental concepts of mechanics: vector operations, force and couples, free body diagrams, equilibrium of a particle and of rigid bodies. Friction. Distributed forces. Centers of gravity and centroids. First and second moments of areas, lines and volumes. Applications from structural and machine elements such as bars, trusses and friction devices. Kinetics and equations of motion of a particle for rectilinear and curvilinear motion.

**Reason:** The added concurrent prerequisite of ENGR 13200 is needed because of the course change in the First-Year Engineering program.



James D. Jones, Associate Professor and Associate Head  
School of Mechanical Engineering

APPROVED FOR THE FACULTY  
OF THE SCHOOLS OF ENGINEERING  
BY THE ENGINEERING  
CURRICULUM COMMITTEE

ECC Minutes #10

Date 2/2/2011

Chairman ECC R. Cipa

