

TO: The Engineering Faculty

FROM: The Faculty of the School of Mechanical Engineering

RE: New Course – ME 19900 How Stuff Works

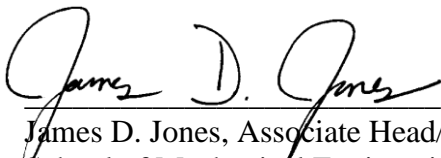
The Faculty of the School of Mechanical Engineering has approved allowing new course ME 19900 How Stuff Works. This action is now submitted to the Engineering Faculty with a recommendation for approval.

[ME 19900 – How Stuff Works](#)

Credit Hours: 1.00. An introduction to Mechanical Engineering for First-Year Engineering students interested in exploring a career in ME. The course is student led and involves a mix of presentations from successful alumni about their chosen careers coupled with fun hands-on experiences related to the invited industries leading to a better understanding of the broad career opportunities available to students with an ME degree. Little or no mechanical experience is required. A variety of common products are dissected to learn the underlying engineering design and fabrication fundamentals. Students are also introduced to the standard engineering terminology used in common products.

Rationale

First-Year Engineering students frequently struggle with the decision as to which professional School to pursue. ME 19900 is a fun and insightful course that serves as an effective introduction to Mechanical Engineering for First-Year Engineering students interested in exploring a career in ME. The course has a mix of presentations from successfully alumni coupled with hands-on experiences related to the invited industries. Recent enrollments have run 60-90 students per semester with further expansion planned and can be instrumental in helping students to understand the broad career opportunities available in ME. This course is ME's version of the ENGR 10300 courses many other Professional Schools offer FYE students.

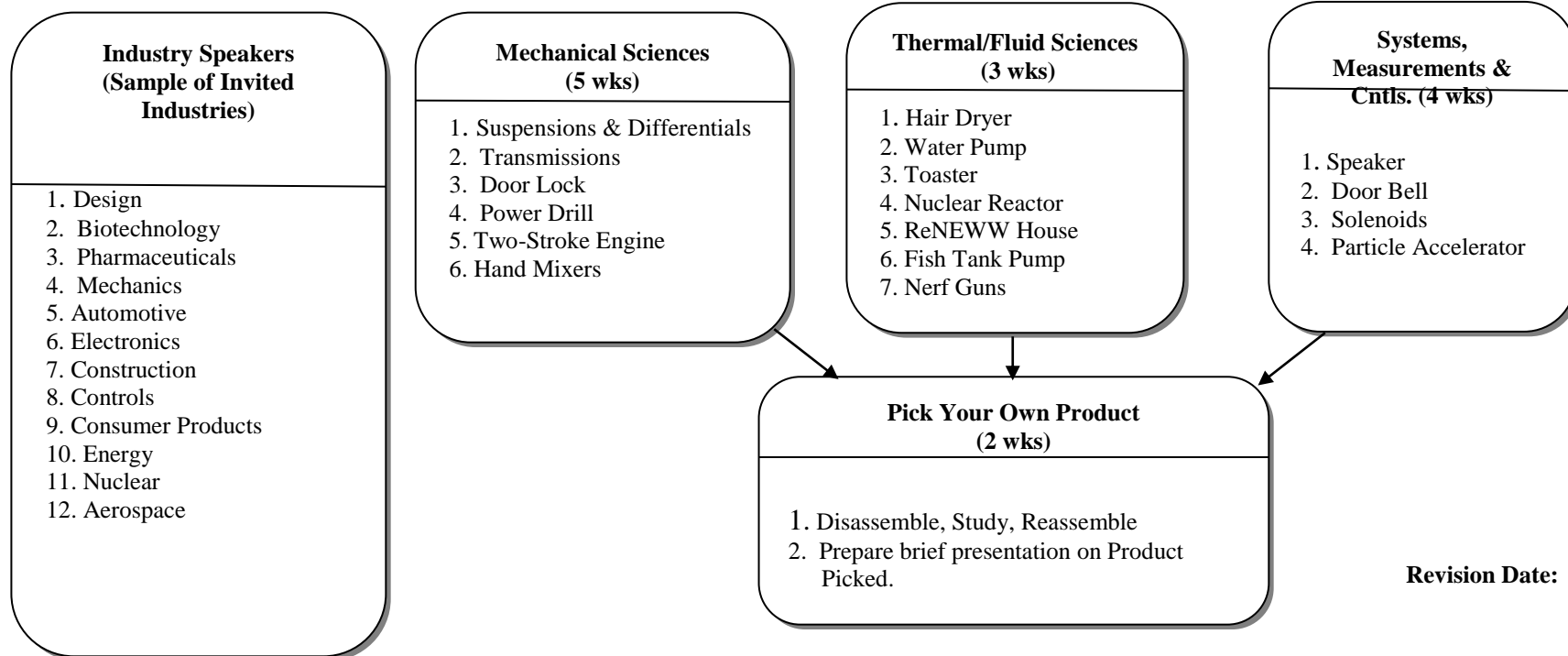


James D. Jones, Associate Head/Professor
School of Mechanical Engineering

ME 1990
HOW STUFF WORKS

Course Outcomes

1. To become familiar with *common products* and how they work. [A2]
2. Gain *hands-on experience* and develop your *mechanical aptitude* by dissecting products, studying the basic engineering and operation of the products and reassembling the products. [A2]
3. Become familiar with *common engineering terminology* used in describing the various parts and assemblies of products. [A2]



Revision Date: 11/15/18

COURSE NUMBER: ME 19900		COURSE TITLE: How Stuff Works	
REQUIRED COURSE OR ELECTIVE COURSE: Elective		TERMS OFFERED: Fall and Spring	
TEXTBOOK/REQUIRED MATERIAL: None		PRE-REQUISITES: First-Year Engineering Status	
COORDINATING FACULTY: J. Jones		COURSE OUTCOMES: <ol style="list-style-type: none"> 1. To hear from successful alumni about their <i>career paths</i> and common products that they have helped to design and market. [1,2] 2. To become familiar with <i>common products</i> and how they work. [1,2] 3. Gain <i>hands-on experience</i> and develop your <i>mechanical aptitude</i> by dissecting products, studying the basic engineering and operation of the products and reassembling the products. [1] 4. Become familiar with <i>common engineering terminology</i> used in describing the various parts and assemblies of products. [1] RELATED ME PROGRAM OUTCOMES: <ol style="list-style-type: none"> 1. Engineering fundamentals 2. Engineering design 3. Communication skills 4. Ethical/Prof. responsibilities 5. Teamwork skills 6. Experimental skills 7. Knowledge acquisition 	
COURSE DESCRIPTION: Credit Hours: 1.00. An introduction to Mechanical Engineering for First-Year Engineering students interested in exploring a career in ME. The course is student led and involves a mix of presentations from successful alumni about their chosen careers coupled with fun hands-on experiences related to the invited industries leading to a better understanding of the broad career opportunities available to students with an ME degree. Little or no mechanical experience is required. A variety of common products are dissected to learn the underlying engineering design and fabrication fundamentals. Students are also introduced to the standard engineering terminology used in common products.			
ASSESSMENTS TOOLS: <ol style="list-style-type: none"> 1. Class attendance and participation. 2. 			
PROFESSIONAL COMPONENT: <ol style="list-style-type: none"> 1. Engineering Topics: Engineering Science –1 credit (100%) 			
NATURE OF DESIGN CONTENT: N/A			
COMPUTER USAGE: N/A			
COURSE STRUCTURE/SCHEDULE: <ol style="list-style-type: none"> 1. Laboratory – 1 day per week at 100 minutes. 			
PREPARED BY: J. Jones		REVISION UPDATE: Nov. 15, 2018	