

UMBC UGC Change in Existing Course: ENCH 300 Chemical Process Thermodynamics

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Proposed Effective Date: Fall 2010

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COURSE INFORMATION:

change		current	proposed
<input type="checkbox"/>	Course Number(s)	ENCH 300	
<input type="checkbox"/>	Formal Title	Chemical Process Thermodynamics	
<input type="checkbox"/>	Transcript Title (≤24c)	Chem Proc Thermodynamics	
<input checked="" type="checkbox"/>	Recommended Course Preparation		ENCH 225
<input checked="" type="checkbox"/>	Prerequisite	ENCH 215, ENCH 225, MATH 251, CHEM 351	ENCH 215, MATH 251, CHEM 351
<input type="checkbox"/>	Credits	3	
<input type="checkbox"/>	Repeatable?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/>	Max. Total Credits		
<input type="checkbox"/>	If yes, how many total credits?		
<input type="checkbox"/>	Grading Method(s)	<input checked="" type="checkbox"/> Reg (A-F) <input type="checkbox"/> Audit <input type="checkbox"/> Pass-Fail	<input type="checkbox"/> Reg (A-F) <input type="checkbox"/> Audit <input type="checkbox"/> Pass-Fail

CURRENT CATALOG DESCRIPTION:

Principles of thermodynamics and their application to engineering problems. First and second laws of thermodynamics; properties of gases; liquids and solids; phase equilibrium; flow and non-flow systems; energy conversion; production of work from heat; thermodynamic analysis of processes; equilibrium-stage operations and the thermodynamics of chemically reacting systems. (Fall) Prerequisite: ENCH 215, ENCH 225, CHEM 351 and MATH 251.

PROPOSED CATALOG DESCRIPTION: no changes change in description

Principles of thermodynamics and their application to engineering problems. First and second laws of thermodynamics; properties of gases; liquids and solids; phase equilibrium; flow and non-flow systems; energy conversion; production of work from heat; thermodynamic analysis of processes; equilibrium-stage operations and the thermodynamics of chemically reacting systems. (Fall) Recommended: ENCH 225; Prerequisite: ENCH 215, CHEM 351 and MATH 251.

RATIONALE FOR CHANGE

Requiring ENCH 225 as a pre-requisite course for ENCH 300 (and ENCH 425) is a barrier to transfer students. Due to the specific course sequencing necessary in the major, the result of this pre-requisite requirement was that transfer students coming in after two years of coursework could not complete a chemical engineering degree in two additional years. As a result we have restructured both ENCH 225 and ENCH 300 so that it will be appropriate to list the course as “recommended” instead of requiring it as a prerequisite. This will allow transfer students the opportunity to finish the degree in four years total instead of 5.