

CBM003 ADD/CHANGE FORM

Undergraduate Council
 New Course Course Change 2009
 Core Category: NONE Effective Fall 2008

or

Graduate/Professional Studies Council
 New Course Course Change
 Effective Fall __

RECEIVED MAR 06 2008

1. Department: CHE ENG College: ENGR
2. Person Submitting Form: Dr. Michael P. Harold Telephone: 34307
3. Course Information on New/Revised course:
 - Instructional Area / Course Number / Long Course Title:
PETR / 1111 / Introduction to Hydrocarbon Resources
 - Instructional Area / Course Number / Short Course Title (30 characters max.)
PETR / 1111 / INTRO HYDROCARBON RESOURCES
 - SCH: 1.00 Level: FR CIP Code: 14.2501.00 Lect Hrs: 1 Lab Hrs: 0
4. Justification for adding/changing course: **To provide for new discipline areas**
5. Was the proposed/revised course previously offered as a special topics course? Yes No
 If Yes, please complete:
 - Instructional Area / Course Number / Long Course Title:
____ / ____ / ____
 - Content ID: _____ Start Date (yyyy3): _____
6. Authorized Degree Program(s): B.S. Petroleum Engineering
 - Does this course affect major/minor requirements in the College/Department? Yes No
 - Does this course affect major/minor requirements in other Colleges/Departments? Yes No
 - Are special fees attached to this course? Yes No
 - Can the course be repeated for credit? Yes No
7. Grade Option: Letter (A, B, C ...) Instruction Type: lecture ONLY (Note: Lect/Lab info. must match item 3, above.)
8. If this form involves a change to an existing course, please obtain the following information from the course inventory: Instructional Area / Course Number / Long Course Title
 ____ / ____ / ____
 - Start Date (yyyy3): _____ Content I.D.: _____
9. Proposed Catalog Description: (If there are no prerequisites, type in "none".)
 Cr: 1. (1-0). Prerequisites: MATH 1431 Description (30 words max.): Overview of petroleum industry and petroleum engineering including nature of oil and gas reservoirs, petroleum exploration and drilling, formation evaluation, completion and production, reservoir mechanics, and improved oil recovery.
10. Dean's Signature: Joseph W Tedesco Date: 3/6/08
 Print/Type Name: Joseph Tedesco, Dean

Cullen College of Engineering
 CBM003 Supplement - B Form
 (New Course)

Must be attached to CBM003 form

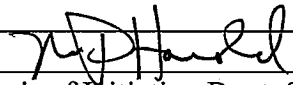
Course: <u>PETR</u>	<u>1111</u>
<i>Subject Prefix</i>	<i>Course Number</i>

1. **Course Title:** Introduction to Hydrocarbon Resources
Print course inventory screen using RARCAS/CATM and attach.
2. **Pre-requisite/Co-requisite:** Math 1431.
3. **Rational for Course Format:** Standard University format
4. **Rational for Course Content:** Introduce students to hydrocarbon energy and various operations and systems that are used for its exploration, development and production
5. **ABET Constituents consulted:** Petroleum Engineering Advisory Board, and several industry surveys
6. **State Course Outcomes:** Students learn the various aspects of oil and gas industry
7. **Course Performance after implementing format and content changes:** _____¹
8. **Is course required?** X Yes No
9. **Required course outline attached?** X Yes No
10. **Estimated student demand** 100 per semester
11. **Similar courses in other departments:** Yes XNo
 a. *If yes, list course(s)* _____
12. **Is course part of a sequence?** Yes XNo
 a. *If Yes, identify the sequence and comment on the relation to prior and subsequent courses:* _____
13. **Textbook(s) and other required materials:** To be determined later

Note: Special Fees: If special fees requested, **Course Related Fee Request Form** will be required.

¹ Department reports will be requested about the effects of your new course on your curriculum both 12 and 24 months after the effective date for this new course.

Cullen College of Engineer **UC 9764 08F**
CBM003 Supplement - B Fc Page 3 of 5
(New Course)

	2/21/08	<input checked="" type="checkbox"/> Approved
Chair of Initiating Dept. Signature	Date	

PETR 1111: Introduction to Hydrocarbon Resources Credit 1

Catalog Description: Overview of petroleum industry and petroleum engineering including nature of oil and gas reservoirs, petroleum exploration and drilling, formation evaluation, completion and production, reservoir mechanics, and improved oil recovery.

Prerequisites (s): MATH 1431.

Course Objectives:

1. Learn about the petroleum industry and its history and role in global politics and the world economy.
2. Learn how to get a summer job in the petroleum industry and why it is important.
3. Understand whether Petroleum Engineering is an appropriate career choice.

Topics and Hours

Topic	Hours
1. Overview, Introduction to Petroleum Engineering	1
2. Nature of Oil & Gas, The Earth's Crust, Geological Time	1
3. Reservoir Rocks, Sedimentary Rock Dist. Ocean Environment	1
4. Source Rocks, Generation, Migration and Accum of Petroleum	1
5. Maps and Traps	1
6. Exploration	1
7. Mid-Term Examination	1
8. Drilling	1
9. Formation Evaluation	1
10. Completion & Facilities	1
11. Production Practices	1
12. Reservoir Recovery & Reserves	1
13. Review & Course Evaluation	1
14. Final Examination	1
Total Hours	14

Method of Evaluation:

Class Participation	25%
Weekly Tests	25%
Mid-Term	25%
Final Examination	25%
Total	100%

Contributions to Professional Component:

1. Petroleum Engineering: Provides students an overview of the oil and gas industry; Introduces students to Petroleum Engineering concepts of porosity,

permeability, and saturation. Introduces students to terminology in drilling, formation evaluation, production, and reservoir engineering.

2. General Education: Introduces students to the role of the petroleum industry in our society and the world and constraints on practice of Petroleum Engineering.

Relationship of Course to Program Outcomes:

Course Objective	Program Outcome
Learn about the petroleum industry and its history and role in global politics and the world economy.	An ability to take the requirements of the free-market commercial system in which the petroleum industry usually functions, in problem definition and solution . A knowledge of contemporary issues The broad education necessary to understand the impact of engineering solutions in a global and societal context
Learn how to get a summer job in the petroleum industry and why it's important.	Specific life and career goals, and the flexibility to modify goals and plans as circumstances dictate.
Understand whether petroleum engineering is an appropriate career choice.	Specific life and career goals, and the flexibility to modify goals and plans as circumstances dictate.