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11-099

NOV 02 2011

Revised 4/22/2009

RECORDS

UNDERGRADUATE CURRICULUM PROPOSAL COVER SHEET

UTC

Title of Proposal - Must begin with Department Abbreviation:

MAR 10 2011

GEOL Prerequisite addition for 4360 Fossil Fuels

Check One:  Full Proposal or  Information Item

Effective Date for Curricular Offer: FALL 2011

FROM: Ann Holmes, Geology, 218 Grote, X1704; Ann-Holmes@utc.edu

(proposal originator: include spokesperson's name, department, office number, telephone, e-mail)

Does this require new resources from the originating department or other department? no

Please include an explanation if yes.

Faculty of the originating department approved this proposal on 17 February, 2011 (date), by a vote of 4 aye votes; 0 nay votes; 0 abstentions; 0 eligible voting members absent.

The following have examined this proposal:

Dept Head/Director: Habte Churnet Habte Churnet     
Printed name Signature, date Approve Neutral Disapprove\*

College Curriculum Committee Date: \_\_\_\_\_ Vote: \_\_\_\_\_ Signature of Chair: \_\_\_\_\_

Spokespersons for Affected Departments:

Printed Name, Department Signature, Date Approve Neutral Disapprove\*  
John C. Tucker, Biological & Earth Sciences John C. Tucker 11/1/11

Dean/Director: H. Burkenn H. Burkenn

University Registrar: Linda Orth Linda Orth \_\_\_\_\_  
Printed name Signature, date Comments

Provost/Representative: J Sanders J Sanders 6/8/11     
Printed name Signature, date Approve Neutral Disapprove\*

Lab/studio fee requested:

Provost: Phil Oldham \_\_\_\_\_    
Printed name Signature, date Approve Disapprove\*

\*Those who disapprove may attach an explanation

ACTIONS on this proposal:	Curriculum Committee	Faculty Senate
Date the proposal was considered	<u>10-26-2011</u>	<u>12-1-11</u>
Vote of the body:	<u>8-0-0</u>	<u>16-0-0</u>
Accepted as information item (indicate date)	<u>[Signature]</u>	
Approved as submitted (indicate date)		<u>12-1-11</u>
Approved with amendments (amendments indicated and transmitted to all signatories above, date):	<u>11-9-2011</u>	
Signature of Chair:	<u>[Signature]</u>	<u>[Signature]</u>

Banner Catalog 3-22-11  
Acatalog Catalog 3-23-11 ce

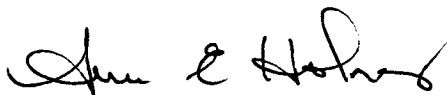
October 27 2011

Addendum to Curriculum Committee Proposal 11-099

Submitted March 2011

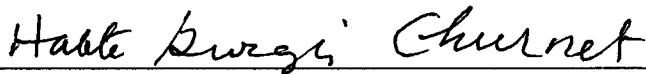
**Impact statement for adding Historical Geology 1120/L to the prerequisites for  
GEOL 4360 Fossil Fuels**

As stated in the proposal, students who have not taken **GEOL 1120/L** Historical Geology prior to beginning 4260 Fossil Fuels have not performed as well as those who have. In response to an evaluation question, students also state that having this course would improve their success. This course is offered every other year in spring semester. Geology majors who take this class as an elective would be affected, only if they take it in their first year of geology curriculum; they would have another opportunity to take it later in their academic careers. Environmental Science: Geology majors are required to take 1110/L and **1120/L** and may choose Fossils Fuels from a suite of courses. They, too, should complete **1120/L** before taking 4360. The only category of students who may be affected negatively (as per Brad Reynolds, Biology & Environmental Science) would be Environmental Resources majors, who might choose this course as an elective.



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Ann E Holmes



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Habte G. Churnet, Department Head

March 10 2011

Curriculum Committee Full Proposal  
Geology Program of Department of Physics, Geology & Astronomy

**Summary**

Change in prerequisites

Geology 4360 Fossil Fuels

Add 1120/1120L Historical Geology prerequisite or dept. approval

**Rationale for change:**

Students who take Fossil Fuels without Historical Geology are not performing as well as students who have had this class. The department has determined that students should take Historical Geology lecture and lab before taking Fossil Fuels. This is supported by students' responses agree that this prerequisite would have a positive effect on performance.

**Current Course Description in UTC catalog**

GEOL 4360 - Fossil Fuels

(3) Credit Hours

Stratigraphic and sedimentological study of fossil-fuel deposits and the scientific basis for fossil-fuel exploration, including interpretation of gamma-ray well logs and preparation of panel diagrams, structure contour maps and isopach maps. On demand. Prerequisite: GEOL 1110/GEOL 1110L or department head approval.

**Proposed Course Descriptions for 4360 Fossil Fuels**

Stratigraphic and sedimentological study of fossil-fuel deposits and the scientific basis for fossil-fuel exploration, including interpretation of gamma-ray well logs and preparation of panel diagrams, structure contour maps and isopach maps. On demand. Prerequisites: GEOL 1110/GEOL 1110L, <sup>^</sup>GEOL 1120/GEOL 1120L<sup>v</sup> or department head approval.

and

## FOSSIL FUELS SYLLABUS

Spring 2011  
001

COURSE: 4360, 001, CRN 22736

TITLE: Fossil Fuels

CLASS SCHEDULE: 11:00-11:50 a.m., MWF, Grote 208

CREDIT: 3 hours

FACULTY: Ann Holmes, 218D Grote, 423-425-1704, office hours: M-F 10:00-10:30 a.m., M-W 2:00-3:00 p.m., or by appointment.

[Ann-Holmes@utc.edu](mailto:Ann-Holmes@utc.edu) will respond to emails and telephone calls within 24 hours during the week.

ADA STATEMENT: Attention: If you are a student with a disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) and think that you might need special assistance or a special accommodation in this class or any other class, call the Office for Students with Disabilities at 425-4006, come by the office 102 Frist Hall or see <http://www.utc.edu/OSD/>

If you find that personal problems, career indecision, study and time management difficulties, etc. are adversely affecting your successful progress at UTC, please contact the Counseling and Career Planning Center at 425-4438 or <http://www.utc.edu/Administration/CounselingAndCareerPlanning/>.

INTRODUCTION: In this 400-level course, each student is expected to participate fully and contribute daily to class discussions. Class discussions include news articles and points-of-view from readings in text. In this class we will study the geological aspects of fossil-fuel (coal, oil and gas) deposits and other key energy sources including uranium, hydroelectric, nuclear, and geothermal. We will also briefly examine solar, wind, wave-tidal, biological and chemical sources of energy. We will review the development of these resources, patterns of utilization, environmental implications, economic assessments and industrial risks. We will investigate climate change evidence and issues.

TEXTBOOK: *Beyond Smoke and Mirrors, climate change and energy in the 21<sup>st</sup> Century* by Burton Richter, 2010 edition, ISBN 978-0-521-74781-3, paperback version. Amazon has e-versions for Kindles, as well as new and used copies for ~\$20. Try to get one as soon as possible.

GRADING: Two cumulative exams each contribute 30% towards 60% of your final grade. The remaining 40% generated by various classroom assignments (20%) and gathering and summarizing energy-related news reports (20%).

**Statement on Plagiarism:** Plagiarism occurs when you use words, phrases, sentence arrangement, or the expressed thoughts of someone else in your writing without giving credit to the source. In the most blatant cases, a student will turn in a paper that was written by another person, downloaded from an Internet site, or ordered from an "essay factory" or "term-paper mill." In other cases, students commit plagiarism because they do not properly document outside source material. In either case, plagiarism is wrong.

Documentation is required when you quote, paraphrase, or summarize the words or ideas of other writers in your own writing. The Writing Matters Handbook and other sources clearly explain how to give credit to outside material that you use in your work. If you are uncertain how or whether to document material, consult your instructor before turning in the paper.

Papers and other written assignments in this class must be submitted to UTC Online (Blackboard) text-matching software (SafeAssign) for review and to analyze for originality and intellectual integrity. By submitting your paper online, you agree to have your paper included in the institutional repository of digital papers. If the results of the review indicate academic dishonesty, disciplinary action may be taken against the student as outlined in the UTC Student Handbook.

### **Web Resources Menu**

#### **Choose one of the US news websites to visit 2 times a week or read in library:**

Search the science/energy/technology sections

New York Times

<http://www.nytimes.com/>

Washington Post (sign up for free, and read the national and tech news)

<http://www.washingtonpost.com/>

Los Angeles Times

<http://www.latimes.com/>

Christian Science Monitor

<http://www.csmonitor.com/>

#### **Use this global news website to visit 2 times a week (or another site of your choice):**

BBC World News

<http://news.bbc.co.uk/>

#### **Choose one of these business-focused media resources to visit weekly or biweekly:**

The Economist online or in the library

<http://www.economist.com/>

The Wall Street Journal online or in the library

<http://online.wsj.com/public/us>

#### **Another source to be monitored occasionally:**

United States Department of Energy, Energy Information Administration

<http://www.eia.doe.gov/>

be sure to visit the Press Room occasionally

**Important Dates:** last day to drop - Jan 30; midterm grades due to students - Feb 28-Mar 4; last day to withdraw with W - 13 March; 15 March- deadline for graduation submission; Spring Break 14-20 March; no class 22 April (Good Friday); last day of class - 29 Apr.