

NEW COURSE FORM

1. General Information.

- a. Submitted by the College of: Engineering Today's Date: April 4, 2011
- b. Department/Division: College of Engineering
- c. Contact person name: Thomas Lester Email: lester@engr.uky.edu Phone: 257-1687
- d. Requested Effective Date: Semester following approval OR Specific Term/Year¹: _____

2. Designation and Description of Proposed Course.

- a. Prefix and Number: EGR 120
- b. Full Title: Technology: Blessing or Curse
- c. Transcript Title (if full title is more than 40 characters): _____
- d. To be Cross-Listed² with (Prefix and Number): _____
- e. Courses must be described by at least one of the meeting patterns below. Include number of actual contact hours³ for each meeting pattern type.

3 Lecture _____ Laboratory¹ _____ Recitation _____ Discussion _____ Indep. Study _____
_____ Clinical _____ Colloquium _____ Practicum _____ Research _____ Residency _____
_____ Seminar _____ Studio _____ Other – Please explain: _____

- f. Identify a grading system: Letter (A, B, C, etc.) Pass/Fail
- g. Number of credits: 3
- h. Is this course repeatable for additional credit? YES NO
If YES: Maximum number of credit hours: _____
If YES: Will this course allow multiple registrations during the same semester? YES NO
- i. Course Description for Bulletin: Technology has created the world in which we live. Our wealth, our economy, and the way we live each day have come about due to the emergence of technology over the centuries. The course will examine the relationship between technology and society; how technology influenced the development of society, how society influenced the development of technology, and how people in society view technology.
- j. Prerequisites, if any: Acceptance into SEAM Program
- k. Will this course also be offered through Distance Learning? YES⁴ NO
- l. Supplementary teaching component, if any: Community-Based Experience Service Learning Both

3. Will this course be taught off campus? YES NO

¹ Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.

² The chair of the cross-listing department must sign off on the Signature Routing Log.

³ In general, undergraduate courses are developed on the principle that one semester hour of credit represents one hour of classroom meeting per week for a semester, exclusive of any laboratory meeting. Laboratory meeting, generally, represents at least two hours per week for a semester for one credit hour. (from SR 5.2.1)

⁴ You must *also* submit the Distance Learning Form in order for the proposed course to be considered for DL delivery.

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4. Frequency of Course Offering.

- a. Course will be offered (check all that apply): Fall Spring Summer
- b. Will the course be offered every year? YES NO
- If NO, explain: _____

5. Are facilities and personnel necessary for the proposed new course available? YES NO
- If NO, explain: _____

6. What enrollment (per section per semester) may reasonably be expected? 40

7. Anticipated Student Demand.

- a. Will this course serve students primarily within the degree program? YES NO
- b. Will it be of interest to a significant number of students outside the degree pgm? YES NO
- If YES, explain: Course will serve 20 engineering students and 20 business students.

8. Check the category most applicable to this course:

- Traditional – Offered in Corresponding Departments at Universities Elsewhere
- Relatively New – Now Being Widely Established
- Not Yet Found in Many (or Any) Other Universities

9. Course Relationship to Program(s).

- a. Is this course part of a proposed new program? YES NO
- If YES, name the proposed new program: _____
- b. Will this course be a new requirement⁵ for ANY program? YES NO
- If YES⁵, list affected programs: _____

10. Information to be Placed on Syllabus.

- a. Is the course 400G or 500? YES NO

If YES, the *differentiation for undergraduate and graduate students must be included* in the information required in **10.b**. You must include: (i) identification of additional assignments by the graduate students; and/or (ii) establishment of different grading criteria in the course for graduate students. (See *SR 3.1.4.*)

- b. The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from **10.a** above) are attached.

⁵ In order to change a program, a program change form must also be submitted.

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Signature Routing Log

General Information:

Course Prefix and Number: EGR 120

Proposal Contact Person Name: Tom Lester Phone: 257-1687 Email: lester@enr.uky.edu

INSTRUCTIONS:

Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:

Reviewing Group	Date Approved	Contact Person (name/phone/email)	Signature
Engineering faculty	5/13/12	Richard Sweigard 78827 rsweigard@enr.uky.edu	<i>Richard Sweigard</i>
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		/ /	
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External-to-College Approvals:

Council	Date Approved	Signature	Approval of Revision ⁶
Undergraduate Council	3/27/2012	Sharon Gill	
Graduate Council			
Health Care Colleges Council			
Senate Council Approval		University Senate Approval	

Comments:

⁶ Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.

EGR 120
Technology: Blessing or Curse
Lead Instructor: Thomas W. Lester
Dean and Professor of Mechanical Engineering
MWF 1000-1050 PM
Ralph G. Anderson Building Room 207

Office:	Ralph G. Anderson Building 353
Office Hours:	By appointment with Robyn (257-1687)
E-Mail:	lester@engr.uky.edu
Course Description:	Technology has created the world in which we live. Our wealth, our economy, and the way we live each day have come about due to the emergence of technology over the centuries. The course will examine the relationship between technology and society; how technology influenced the development of society, how society influenced the development of technology, and how people in society view technology.
Prerequisites:	Acceptance into SEAM Program
Student Learning Outcomes:	The student will be able to: Describe how a technology of their choice evolved from antecedent technologies; Describe how the technology impacted the society in which it arose; Describe how the society influenced the choice, acceptance, or rejection of the technology; and Assess how the technology may affect society in future years.

Required Materials:

Reading assignments are from the following two books

Hot, Flat and Crowded by Thomas L. Friedman, Farrar, Straus, and Giroux, New York, 2008.

The Climate Fix by Roger Pielke, Jr., Basic Books, New York, 2010.

Description of Course Activities and Assignments:**Electronic Journals:**

Students will be required to keep a personal journal of their thoughts and reflections on the reading assignments. Periodically through the semester, students will be asked to submit their most recent journal entry, which will be graded for content and for grammatical construction. Such entries will constitute one-third of the total semester grade. Four journal entries will be collected from each student.

Term Paper:

Students will be required to submit a term paper on a technology/society topic of interest to them. Topics will be submitted to the instructor for prior approval. Term papers will be no longer than 2,500 words, typed, with footnotes/references. (See the Chicago Manual of Style http://www.chicagomanualofstyle.org/tools_citationguide.html) for guidance on how to present citations in either a bibliographic and footnote format. All papers will be original in content. Plagiarism in any form will not be tolerated. Students who engage in plagiarism risk receiving a zero on this course requirement. The term paper grade will constitute one third of the final grade in the course.

Class Discussions:

Students will be expected to participate in class discussions over the reading materials, videos shown in class, or lectures. Class participation will constitute one-third of the final grade in the course.

Course Grading:

- A: 90% and above
- B: Between 80 and 89%
- C: Between 70 and 79%
- D: Between 60 and 69%
- E: Less than 6%

Final Exam Information

There will be no final examination in the course.

Mid-term Grade:

Mid-term grades will be posted in myUK by the deadline established in the Academic Calendar (<http://www.uky.edu/Registrar/AcademicCalendar.htm>)

Submission of Assignments:

Journal entries will be due by 5 PM on the day that students are asked to submit them for review. Journal entries will not be accepted nor graded beyond the stated deadline without prior approval of the instructor. Term papers will be due at 5 PM on the Friday preceding dead week. Term papers will not be accepted after the deadline without prior approval of the instructor. All journal entries and the term paper will be submitted electronically in a word document attachment to E-mail.

Attendance Policy:

Attendance is highly recommended, but not required. Students are picked at random each class period and asked to discuss aspects of the reading assignment for that class.

Excused Absences:

Students need to notify the professor of absences prior to class when possible. S.R. 5.2.4.2 defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit "reasonable cause for nonattendance" by the professor.

Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Information regarding dates of major religious holidays may be obtained through the religious liaison, Mr. Jake Karnes (859-257-2754).

Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused or unexcused) per university policy.

Verification of Absences:

Students may be asked to verify their absences in order for them to be considered excused. Senate Rule 5.2.4.2 states that faculty have the right to request "appropriate verification" when students claim an excused absence because of illness or death in the family. Appropriate notification of absences due to university-related trips is required prior to the absence.

Academic Integrity:

Per university policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the university may be imposed.

Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete information can be found at the following website: <http://www.uky.edu/Ombud>. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Part II of *Student Rights and Responsibilities* (available online <http://www.uky.edu/StudentAffairs/Code/part2.html>) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about the question of plagiarism involving their own work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgement of the fact, the students are guilty of plagiarism. Plagiarism includes reproducing someone else's work, whether it be a published article, chapter of a book, a paper from a friend or some file, or something similar to this. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work that a student submits as his/her own, whoever that other person may be.

Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone. When a student's assignment involves research in outside sources of information, the student must carefully acknowledge exactly what, where and how he/she employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas that are so generally and freely circulated as to be a part of the public domain (Section 6.3.1).

Please note: Any assignment you turn in may be submitted to an electronic database to check for plagiarism.

Accommodations due to disability:

If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, email address: jkarnes@email.uky.edu) for coordination of campus disability services available to students with disabilities.

Tentative Course Schedule:

Week	Topic	Reading
1	The Nature of Technology	Hand outs
2	Energy and the Environment: Where we're at	HFC Chaps 1-3
3	Energy and the Environment: How we got here	HFC Chaps 5-7
4	Energy and the Environment: Energy Technology Basics	HFC Chaps 9-11
5	Energy and the Environment: Technological Fixes	HFC Chaps 12 & 13
6	Energy and the Environment: Geopolitical issues	HFC Chaps 15 & 16
7	Climate Science: A primer	RP Chaps 1 & 2
8	Moving beyond carbon:	RP Chaps 3 & 4
9	Technological Fixes & Backstops	RP Chap 5
10	Politics and Climate Science	RP Chaps 6 & 8
11	The News Media and Disasters	RP Chap 7
12	Climate Change: What Can We Realistically Do?	RP Chap 9
13	Health Care in America: A History	Hand outs
14	Technology and Health Care: Angle or Life or Death?	Hand outs
15	Technology: Risk/Benefit Assessments	Hand outs

HFC:

Hot, Flat and Crowded

RP:

The Climate Fix