

Course Information

Date Submitted: 3/23/2015

Current Prefix and Number: EGR - Engineering , EGR 120 TECHNOLOGY: BLESSING OR CURSE

Other Course:

Proposed Prefix and Number: EGR 120

What type of change is being proposed?

Major Change

Should this course be a UK Core Course? Yes

Inquiry - Social Sciences

RECEIVED

OCT 16 2015

OFFICE OF THE
SENATE COUNCIL**1. General Information**

a. Submitted by the College of: ENGINEERING

b. Department/Division: Engineering

c. Is there a change in 'ownership' of the course? No

If YES, what college/department will offer the course instead: Select...

e. Contact Person

Name: Kimberly Anderson

Email: kimberly.anderson@uky.edu

Phone: 7-1864

Responsible Faculty ID (if different from Contact)

Name:

Email:

Phone:

f. Requested Effective Date

Semester Following Approval: Yes OR Effective Semester:

2. Designation and Description of Proposed Course

a. Current Distance Learning (DL) Status: N/A

b. Full Title: TECHNOLOGY: BLESSING OR CURSE

Proposed Title: TECHNOLOGY: BLESSING OR CURSE

c. Current Transcript Title: TECHNOLOGY: BLESSING OR CURSE

Proposed Transcript Title:

d. Current Cross-listing: none

Proposed – ADD Cross-listing :

Proposed – REMOVE Cross-listing:

e. Current Meeting Patterns

LECTURE: 3

Proposed Meeting Patterns

LECTURE: 3

f. Current Grading System: ABC Letter Grade Scale

Proposed Grading System: *Letter (A, B, C, etc.)*

g. Current number of credit hours: 3

Proposed number of credit hours: 3

h. Currently, is this course repeatable for additional credit? No

Proposed to be repeatable for additional credit? No

If Yes: Maximum number of credit hours:

If Yes: Will this course allow multiple registrations during the same semester? No

2i. Current 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.

Proposed 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.

2j. Current Prerequisites, if any: Acceptance into SEAM Honors Program

Proposed Prerequisites, if any: Acceptance into SEAM Honors Program

2k. Current Supplementary Teaching Component:

Proposed Supplementary Teaching Component: No Change

3. Currently, is this course taught off campus? No

Proposed to be taught off campus? No

If YES, enter the off campus address:

4. Are significant changes in content/student learning outcomes of the course being proposed? No

If YES, explain and offer brief rationale:

5a. Are there other depts. and/or pgms that could be affected by the proposed change? No

If YES, identify the depts. and/or pgms:

5b. Will modifying this course result in a new requirement of ANY program? No

If YES, list the program(s) here:

6. Check box if changed to 400G or 500: No

Distance Learning Form

Instructor Name:

Instructor Email:

Internet/Web-based: No

Interactive Video: No

Hybrid: No

1. How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations?

2. How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.

3. How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy; etc.

4. Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above?

If yes, which percentage, and which program(s)?

5. How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?

6. How do course requirements ensure that students make appropriate use of learning resources?

7. Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.

8. How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (<http://www.uky.edu/UKIT/>)?

9. Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? NO

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

10. Does the syllabus contain all the required components? NO

11.I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name:

SIGNATURE|CHE202|Kimberly W Anderson|EGR 120 CHANGE Dept Review|20150323

SIGNATURE|BJSTOK0|Barbara J Brandenburg|EGR 120 CHANGE College Review|20150406

SIGNATURE|DHELM0|Donald W Helme|EGR 120 CHANGE UKCEC Expert Review|20150427

SIGNATURE|JMETT2|Joanie Ett-Mims|EGR 120 CHANGE UKCEC Review|20150427

SIGNATURE|CHE202|Kimberly W Anderson|EGR 120 CHANGE Approval Returned to Dept|20150916

SIGNATURE|DHELM0|Donald W Helme|EGR 120 CHANGE UKCEC Expert Review|20150917

SIGNATURE|JMETT2|Joanie Ett-Mims|EGR 120 CHANGE UKCEC Review|20150921

SIGNATURE|JMETT2|Joanie Ett-Mims|EGR 120 CHANGE Undergrad Council Review|20151014

Course Change Form

<https://myuk.uky.edu/sap/bc/soap/rfc?services=>

Open in full window to print or save

Generate R

Attachments:

Upload File

ID	Attachment
Delete 4673	Social Science Course Review Form2.docx
Delete 4676	Attachment C.pdf
Delete 4729	Attachment B.pdf

NOTE: Start form entry by choosing the Current Prefix and Number (*denotes required fields)

Current Prefix and Number:		EGR - Engineering EGR 120 TECHNOLOGY: BLESSING OR CURSE	Proposed Prefix & Number: (example: PHY 401G) <input type="checkbox"/> Check if same as current	EGR 120
* What type of change is being proposed?		<input checked="" type="checkbox"/> Major Change <input type="checkbox"/> Major - Add Distance Learning <input type="checkbox"/> Minor - change in number within the same hundred series, e.g. 799 is the same "hundred series" <input type="checkbox"/> Minor - editorial change in course title or description which changes in content or emphasis <input type="checkbox"/> Minor - a change in prerequisite(s) which does not imply a change in course content or emphasis, or which is made necessary by the significant alteration of the prerequisite(s) <input type="checkbox"/> Minor - a cross listing of a course as described above		
Should this course be a UK Core Course? <input checked="" type="radio"/> Yes <input type="radio"/> No				
If YES, check the areas that apply:				
<input type="checkbox"/> Inquiry - Arts & Creativity <input type="checkbox"/> Composition & Communications - II <input type="checkbox"/> Inquiry - Humanities <input type="checkbox"/> Quantitative Foundations <input type="checkbox"/> Inquiry - Nat/Math/Phys Sci <input type="checkbox"/> Statistical Inferential Reasoning <input checked="" type="checkbox"/> Inquiry - Social Sciences <input type="checkbox"/> U.S. Citizenship, Community, Diversity <input type="checkbox"/> Composition & Communications - I <input type="checkbox"/> Global Dynamics				
1. General Information				
a. Submitted by the College of:		ENGINEERING	Submission Date: 3/23/2015	
b. Department/Division:		Engineering		
c.* Is there a change in "ownership" of the course?				
<input type="radio"/> Yes <input checked="" type="radio"/> No If YES, what college/department will offer the course instead? <input type="text" value="Select..."/>				
e.* Contact Person Name:		Kimberly Anderson	Email: kimberly.anderson@uky.edu Phone: 7-1864	
e.* Responsible Faculty ID (if different from Contact):			Email: Phone:	
f.* Requested Effective Date:		<input checked="" type="checkbox"/> Semester Following Approval	OR	Specific Term: ²
2. Designation and Description of Proposed Course.				
a. Current Distance Learning(DL) Status:		<input checked="" type="radio"/> N/A <input type="radio"/> Already approved for DL* <input type="radio"/> Please Add <input type="radio"/> Please Drop		
*If already approved for DL, the Distance Learning Form must also be submitted unless the department affirms (by checking this box) that the proposed change in DL delivery.				
b. Full Title:		TECHNOLOGY: BLESSING OR CURSE	Proposed Title: *	TECHNOLOGY: BLESSING OR
c. Current Transcript Title (if full title is more than 40 characters):			TECHNOLOGY: BLESSING OR CURSE	
c. Proposed Transcript Title (if full title is more than 40 characters):				

d.	Current Cross-listing: <input type="checkbox"/> N/A	OR	Currently ³ Cross-listed with (Prefix & Number):	none	
	Proposed – ADD ² Cross-listing (Prefix & Number):				
	Proposed – REMOVE ^{2,3} Cross-listing (Prefix & Number):				
e.	Courses must be described by at least one of the meeting patterns below. Include number of actual contact hours ² for each meeting pattern				
Current:	Lecture 3	Laboratory ⁵	Recitation	Discussion	Indep. St
	Clinical	Colloquium	Practicum	Research	Resident
	Seminar	Studio	Other _____ Please explain:		
Proposed: *	Lecture 3	Laboratory ⁵	Recitation	Discussion	Indep. St
	Clinical	Colloquium	Practicum	Research	Resident
	Seminar	Studio	Other _____ Please explain:		
f.	Current Grading System:	ABC Letter Grade Scale			
	Proposed Grading System:*	<input checked="" type="radio"/> Letter (A, B, C, etc.) <input type="radio"/> Pass/Fail <input type="radio"/> Medicine Numeric Grade (Non-medical students will receive a letter grade) <input type="radio"/> Graduate School Grade Scale			
g.	Current number of credit hours:	3	Proposed number of credit hours:*	3	
h.*	Currently, is this course repeatable for additional credit?			<input type="radio"/> Yes <input checked="" type="radio"/> No	
*	Proposed to be repeatable for additional credit?			<input type="radio"/> Yes <input checked="" type="radio"/> No	
	If YES:	Maximum number of credit hours:			
	If YES:	Will this course allow multiple registrations during the same semester?		<input type="radio"/> Yes <input checked="" type="radio"/> No	
i.	Current 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.				
*	Proposed 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.	Current Prerequisites, if any:				
	Acceptance into SEAM Honors Program				
*	Proposed Prerequisites, if any:				
	Acceptance into SEAM Honors Program				
k.	Current Supplementary Teaching Component, if any:			<input type="radio"/> Community-Based Experience	

		<input type="radio"/> Service Learning <input type="radio"/> Both
	Proposed Supplementary Teaching Component:	<input type="radio"/> Community-Based Experience <input type="radio"/> Service Learning <input type="radio"/> Both <input checked="" type="radio"/> No Change
3.	Currently, is this course taught off campus?	<input type="radio"/> Yes ☞
*	Proposed to be taught off campus?	<input type="radio"/> Yes ☞
	If YES, enter the off campus address:	
4.*	Are significant changes in content/student learning outcomes of the course being proposed?	<input type="radio"/> Yes ☞
	If YES, explain and offer brief rationale:	
5.	Course Relationship to Program(s).	
a.*	Are there other depts and/or pgms that could be affected by the proposed change?	<input type="radio"/> Yes ☞
	If YES, identify the depts. and/or pgms:	
b.*	Will modifying this course result in a new requirement ² for ANY program?	<input type="radio"/> Yes ☞
	If YES ² , list the program(s) here:	
6.	Information to be Placed on Syllabus.	
a.	<input type="checkbox"/> Check box if changed to 400G or 500.	If changed to 400G- or 500-level course you must send in a syllabus and you must include the differentiation between undergraduate students by: (i) requiring additional assignments by the graduate students; and/or (ii) establishing different grading course for graduate students. (See SR 3.1.4.)

¹See comment description regarding minor course change. *Minor changes are sent directly from dean's office to Senate Council Chair.* If Chair deems the change as "not minor," the form will be sent to appropriate academic Council for normal processing and contact person is informed.

²Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.

³Signature of the chair of the cross-listing department is required on the Signature Routing Log.

⁴Removing a cross-listing does not drop the other course – it merely unlinks the two courses.

⁵Generally, undergrad courses are developed such that one semester hr of credit represents 1 hr of classroom meeting per wk for a semester, exclusive of any lab meeting. Lab meeting generally requires at least two hrs per wk for a semester for 1 credit hour. (See SR 5.2.1.)

⁶You must also submit the Distance Learning Form in order for the course to be considered for DL delivery.

⁷In order to change a program, a program change form must also be submitted.

**Course Review Form
Inquiry in the Social Sciences**

Reviewer Recommendation

Accept Revisions Needed

Course: EGR 120

Using the course syllabus as a reference, identify when and how the following learning outcomes are addressed in the course. Since learning outcomes will likely be addressed multiple ways within the same syllabus, please identify a representative example (or examples) for each outcome.

Readings, lectures, or presentations that promote students' ability to define and distinguish different theoretical approaches associated with a social science discipline, either broadly or as applied to an important social science topic.

Example(s) from syllabus:

- Weeks 10, 11, and 12: Reading assignments from Climate Fix by Roger Pielke, Jr.
- Week 9: Video 9 - episode from Collapse by Jared Diamond
- See attachment A for a copy of the Syllabus and term paper requirements

Brief Description:

- Students are assigned readings from Climate Fix, Roger Pielke's excellent book. Pielke, a political scientist, provides examples on how broad public support can be developed for difficult political decisions, such as passing federal legislation to limit green house emissions, both domestically and internationally.
- Students hear Diamond's excellent analysis of how the failures of past civilizations to adapt to changing environmental conditions led to their ultimate demise. He addresses the cultural issues that impinge on the ability of a society to make difficult decisions.

Processes or assignments where students apply their understanding of methods and ethics of inquiry which lead to social scientific knowledge.

Example(s) from syllabus:

- Week 8: Video 8 - The Ten Terawatt Challenge
- Week 13: Video 13 - The Polio Crusade

Brief Description:

- Nobel Prize winner Richard Smalley at Columbia University details his quest to understand how the world's nations can provide adequate electricity for 10 billion people in 2050 without jeopardizing the world's environment. He underscores the importance of this initiative in addressing poverty, terrorism, and famine.
- A PBS video on the societal response to polio in the 1940's and 1950's and how the media collaborated with the Roosevelt administration to focus the national attention on a relatively minor disease.

Artifacts of assignments or exercises that require students to demonstrate the ability to identify and use appropriate information resources to substantiate evidence-based claims.

Example(s) from syllabus:

Week 10: Video 10 - An Inconvenient Truth
See Attachment B for the artifacts of student work

Brief Description:

- Al Gore's Academy Award winning documentary on climate change is notable for its numerous factual errors and exaggerations. A companion video, The Great Climate Swindle, has similar factual errors and exaggerations. Students are asked to submit journal entries on each video in which they are to discuss these inaccuracies and inconsistencies based on their own reading of popular and scientific literature

Processes, assignments or exercises that demonstrate students' application of the knowledge of how a social science discipline influences society.

Example(s) from syllabus:

-Week 4: Video 4-A Woman's Place

Brief Description:

Episode from award winning BBC documentary on how well a modern family adapts to living for three months in a Victorian-era house in London. In this episode, the efforts by women to attain equal rights and voting rights is detailed against the pernicious impact that primitive technology had on their ability to pursue these objectives.

Artifacts of assignments or exercises that require students to demonstrate an ability to identify a well-formulated question pertinent to a social science discipline and to employ the discipline's conceptual and methodological approaches in identifying reasonable research strategies that could speak to the question.

Example(s) from syllabus:

Term paper on technology/society topic of interest to each student.
See Attachment C for examples of student work.

Brief Description:

Term papers of approximately 2,500 words are required from each student and count as one-third of their course grade. A copy of the requirements of the term paper is attached along with the syllabus to this application.

Reviewer's Comments

Attachment C: Artifacts submitted in response to item 5

Madison Brotherton

Dean Lester

EGR 120-001

30 Nov. 2012

The Vacuum Cleaner

What would life be like without technology? Technology has been an influential part of our lives ever since the Industrial Revolution in late eighteenth century. It has brought the world together; from calling your friends on your cell phone, to saving countless people's lives, even having the ability to pay your bills online. Without technology we would not be able to live as we do now, comfortably and with ease. There would be no text messages, emails, or Facebook; we would still be sending hand written letters through the mail, hoping they would actually get to its destination without getting lost. Houses would not be insulated, accumulating dust, no electricity, and barely enough hot water to fill a bath. There are many technology devices today that could be considered a curse to society, however; the invention of the vacuum cleaner was more of a blessing than a curse. Although women would be spending more time in the home, it allowed for a more efficient way to get rid of dirt and dust, by reducing the amount of bacteria and germs found in homes.

A vacuum cleaner is a contraption with many names such as, the Hoover, the sweeper, and the dust buster. However, no matter what name you call it, all vacuums have the one soul purpose, to get rid of the dust and dirt, to clean. It is a device that uses an air pump to create a partial vacuum, which sucks up dust and dirt from floors.

The birth of the vacuum cleaner stems from numerous advancements in technology, brought about by the Industrial Revolution. During this era, the mid 1800's, factories were producing hundreds of thousands of manufactured goods. Along side of these technological advancements, factories were beginning to produce tons of pollution that ventured into the atmosphere. With the mass production of pollution, a scientist, at the time, named Louis Pasteur, made several advanced discoveries, leading him to theorize that, "infectious diseases were caused by microorganisms or 'germs'" (Vacuum Cleaner History - Invention of the Vacuum Cleaner). Thus, with his discoveries and the germ theory, he came to a conclusion that the pollution that filled the air, caused people, for the first time, to focus on personal hygiene and cleanliness.



Originally, before the vacuum cleaner, dust accumulated on rugs of homes. So in order for them to be cleaned they were hung over walls or taken outside and were hit repeatedly with a carpet beater; a common housecleaning tool that was usually made from wood, rattan, cane, wicker, spring steel, or coiled wire. "The carpet beater consists of a long handle with a broad, flat head, which often has a pleated or knot-like design" (Holloway, J.B and M. C. Hughes). They resemble a fly swatter or a tennis racquet but are much larger in order to loosen dust and dirt from carpets effectively. Some carpet beaters are still used today, but they were most commonly used up until the middle of the twentieth century, until they were replaced by the popular carpet sweeper and affordable vacuum cleaners.

On June 8, 1869, Ives W. McGaffey, a Chicago inventor, patented the first vacuum-related invention known as the "Whirlwind." His invention was a device intended to clean rugs, however it was not a motorized vacuum cleaner. It was a manually powered machine that required the assistance of more than one person. The Whirlwind was an inconvenient device, because it needed to be cranked in order to operate; one person turned the crank while the other person pushed the mechanism along the floor (The People History). The Whirlwind was mainly marketed throughout the Chicago and Boston area, however, in 1871 most of the inventory burned up in the Chicago fire. In the documentary series, the "1900 House," which aired on PBS Channel 4 in 1999, one family was picked

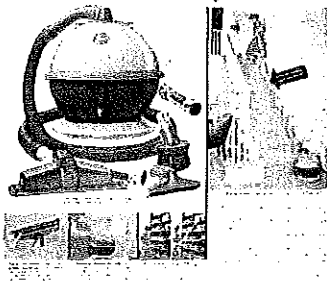
to live in a house that was stripped of its modern amenities and put back to its original state, from the year 1900. The Bowler family who lived in England was chosen out of four hundred families to live in the 1900 House. Throughout the series we are able to see the struggle that the family had to partake in with using 1900 amenities. One of the biggest hardships of living in the 1900 House was keeping it clean. It accumulated more and more dust everyday. In a specific scene we see Mr. Bowler attempting to use the 1900 version of the vacuum cleaner, which resembles some of the descriptions of vacuums that were used before the introduction of electricity. Most "vacuums" were handheld or had a foot pump, actually resembling an accordion pleat, but they ended up being more of an inconvenience than a helpful cleaning product; they seemed to push more air and dirt out than it sucked in (1900 House). It wasn't until the year 1901 when Herbert C. Booth, of England, introduced the first practical suction vacuum cleaner.

Booth's version of the vacuum cleaner came about while attending a "demonstration of a compressed-air machine that blew dust out." During this demonstration Booth became convinced that suction was the correct method to use (BookRags). It is said that Booth tested his theory, that suction is more efficient than blowing air out, at a fancy London restaurant. He placed a white handkerchief back of an upholstered chair and then placed his mouth overtop of it. After sucking in, Booth realized that he extracted a good amount of dust, which appeared on the white handkerchief. Due to his finding in the London restaurant, he promptly designed a vacuum cleaner with an effective dust filter that was powered by a five-horsepower piston motor (The People History). While Booth's powerful machine worked well, the downside of it was that the machine was, "extremely heavy, large, and awkward."

Around the same time across the Atlantic Ocean, two Americans invented their own versions of the vacuum cleaner. Corrine Dufour, from the state of Georgia, developed an "Electric Sweeper" and "Dust Gatherer" which used an electrically powered fan to suck dust up from the ground, into the device, on to a wet sponge, so the dust would stay put. In New Jersey, a plumber, David E. Kennedy developed a massive suction machine that was installed in the basement of buildings. This machine had multiple pipes that lead to outlets of each room in the building to suction up dust (BookRags).

A small and convenient home vacuum cleaner was made possible once the small electric motor was developed in 1907. James Murray Spangler, an Ohio inventor, was working as a janitor, when he was plagued with a sickly cough due to dust that was stirred up from the inefficient carpet sweeper he was required to use at work. This is when he decided to invent a lighter, more efficient, and easier machine to use (BookRags). His original model was made up of, "a soap box, an old electric fan, goat bristles, a broom handle, and a pillow case as the

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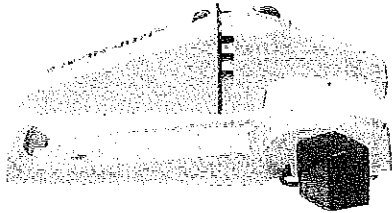
bag." In 1908 Spangler was awarded a patent for his vacuum technology that involved, "a rotating brush coupled with an electric vacuuming apparatus" (The People History). He sold his idea to his cousin's husband, William H. Hoover, who was president of the newly known Hoover Company.

After Spangler's original model was given some updates and adjustments, the Hoover machine, like most others of this time, stood in an upright position (BookRags). By 1952, the Hoover Company created the "Hoover Constellation," which was a vacuum cleaner that hovered above the ground as it cleaned; which is a pretty clever name if you think about it (The People History).

As vacuum cleaners advanced throughout the years more thought was put into the design, and parts were added to them in order to allow a more effective cleaning experience. In 1920, The Air-way Sanitizer Company, which began in Toledo, Ohio, introduced their new "top of the line" product; the "filter fiber." The filter fiber was a disposable bag that you attached to your vacuum cleaner in order for it to suck up and capture the dust and dirt from your floors. From there on, The Air-way Sanitizer Company manufactured the first Air-Way canister vacuum in 1937. This device would be the backbone of the company's success for the next sixty years (Air-way History). The first cylinder, "tank style" vacuum machine originated in Sweden but was then brought to the United States in 1924 by a man named Gustaf Sahlin. These series of vacuums provided many positive assets such as, wheels, so the machine could glide along the floor, and an attached flexible hose, that allowed for cleaning in "hard-to-reach" places, such as, under furniture and on draperies (BookRags).

It wasn't until after World War II that vacuum cleaners became a common household item throughout American homes. The western culture was more in need of this machine because their homes typically had large areas of carpet that needed to be cleaned. In 1941 the

Bureau of Labor released statistics saying that, "80% of all the residences in the United States were wired for electricity...47% of housekeeping families had vacuum cleaners" (Impact). In years following the war, in 1963, David Oreck started the Oreck Corporation, which manufactured upright vacuum cleaners that were originally intended for the United States hotel industry. The concept was to produce a lightweight yet powerful vacuum, so that hotel housekeepers could be relieved of the heavier models used during their laborious workday. Ultimately the idea proved to be successful due to the fact, that today, over fifty thousand hotels throughout the world use commercial grade Oreck vacuums (Clean Made Easy). Due to the popularity of these lightweight vacuums, hotel staff members wanted them for their own homes, which evolved David Oreck's original idea. Instead of only selling to hotels, the company expanded its clientele to begin selling its unique products to the general public.



In the mid 1970's Black and Decker introduced the "Electrolux", a vacuum cleaner that "glided on the floor." It featured a flexible hose that made it possible to clean in hard to reach places. This machine was also portable, cordless, and handheld with a rechargeable power handle. Its improved version, the "Dustbuster," came out in 1979, becoming instantly popular among many, and was the most successful product in Black and Decker history. Because of the mass market of handheld, cordless vacuums, in 1987

Black and Decker's annual sales spiked up to one point seven nine billion dollars, which was five times what the company's sales were in 1972 (The Dustbuster: 1979).

Between 1978 and 1993 James Dyson, a British industrial designer, built thousands of prototypes for the vacuum cleaner before he perfected his Dyson Cyclone Machine. One day James was cleaning his home and was frustrated with the way that his vacuum cleaner quickly lost suction. This was due to a design flaw known as the "bag" system, which vacuum cleaners had been using for almost a hundred years now. In order to get a more efficient suction Dyson designed a vacuum cleaner with a centrifugal force, rather than a bag, in order to separate the dirt from the air (Seabrook, John). In 2002 James Dyson entered the United States market with his Dyson DC07 series vacuum cleaner. It retailed at three hundred and ninety dollars, which was far more expensive than other vacuum retail prices. The raise in price was due to his modern take and design of the vacuum cleaner. Dyson threw away the idea of needing a bag and introduced the idea of centrifugal force suction. His design was also almost entirely made of plastic, with a midsection compartment made of clear plastic, allowing you to see the dirt as you collected it. Originally built off of frustration of a faulty household product, James Dyson created his company, which he and his family are the sole owners of. His rejection of the bag on the vacuum cleaner has brought forth a more modern and efficient way of cleaning. His success as an industrial designer has brought him personal success where his company, in 2008, was valued at one point six billion dollars (Seabrook, John).

The popular question among busy Americans when it comes to household chores is, "Can you make a robot that will clean my house?" Well in 2002 the company iRobot, founded in 1990 by Rod Brooks, Colin Angle, and Helen Greiner, came out with the first robotic vacuum cleaner, Roomba. The robotic device is a small disc like shape, which made its way around rooms using sensors to detect furniture and stairs in order to maneuver around them (iRobot). Although there are many types of robotic vacuum cleaners today the Roomba is the most popular model, selling over two million units since its introduction in 2002 (The People History).

There were not only social and cultural impacts caused by the vacuum cleaner, but there were also environmental and health effects to American families. Overall the idea of technology to improve the home allowed for a woman's job to be easier and not so labor intensive. Vacuum cleaners cleaned more thoroughly than brooms and mops, but earlier made cleaners were clunky and heavy; however, as time moved forward they became more comfortable to use with a better design. The vacuum cleaner's popularity grew extreme because of its ability to remove germs. Today, some vacuum cleaners that are manufactured include special filters and dust bags in order to help reduce allergens, pesticides, and other harmful elements. Because of its ability to eliminate dirt and dust it is one of the topmost domestic goods ever produced. From its groundbreaking ability to eliminate germs it has brought forth more attention to cleaning products for homes. Now when you go to the store you can find up to twenty cleaning product brands, all with multiple solutions for bacteria and germ elimination. The

vacuum cleaner was a life changing and innovative product that has not only modernized our way of cleaning, but it has also allowed for healthier living.

Throughout the last century the development of the vacuum cleaner has been substantial with each passing decade the mechanism gets dramatically more advanced then the year before. The turning point for the vacuum cleaner was James Dyson's DC07 model introduced in 2002. This was the first time we had seen an upright cleaning device without a bag. Its style brought forth a modernized look, made of plastic and a clear middle compartment, allowing its users to visually see the dust they collect. After researching the evolution of the vacuum cleaner I would assume that in years to come that future designs will be more lightweight, possibly quieter, sleek in style, as well as being continually made of modern materials.

The vacuum cleaner is one of the greatest household cleaning aids ever to be invented. This invention stems off of the wanting to be healthier and cleaner, which comes from the mass production of pollution, caused by the Industrial Revolution in the late 1800's. The device's speed and efficiency allows more time for relaxation and less time that is put towards cleaning. Throughout history we can see that the vacuum cleaner has had an important yet impressive evolution of development. It is a reducer of pollutants, germ eliminator, a status symbol, and should be proudly used throughout all homes.

Works Cited:

"1900 House." *1900 House*. Channel 4 PBS. Charlton, United Kingdom, 22 Sept. 1999. Television.

1955 Hoover Constellation Vacuum. Photograph. *AdClassix.com*. AdClassix.com. Web. 27 Nov. 2012. <<http://www.adclassix.com/a3/55hoovervacuum.htm>>.

"Air-way History." *Air-way History*. Airway Sanitizer Corp. Web. 27 Nov. 2012. <<http://airwayvac.com/history.html>>.

Bellis, Mary. "Invention and History of Vacuum Cleaners." *About.com Inventors*. About.com, Web. 27 Nov. 2012. <<http://inventors.about.com/od/uvstartinventions/a/Vacuum-Cleaners.htm>>.

"Clean Made Easy." *Oreck Company History*. Oreck Direct LLC. Web. 28 Nov. 2012. <<http://www.oreck.com/Company-History/company-history,default.pg.html>>.

Holloway, J.E., and M. C. Hughes. "What Is a Carpet Beater?" *WiseGeek*. Conjecture Corp. Web. 27 Nov. 2012. <<http://www.wisegeek.com/what-is-a-carpet-beater.htm>>.

"Impact." *Vacuum Cleaner*. Web. 30 Nov. 2012. <<http://vacuumcleaner.umwblogs.org/impact/>>.

"iRobot; Roomba, Scooba, Verro, Dirt Dog, Looj, Packbot a Company History." *iRobot; Roomba, Scooba, Verro, Dirt Dog, Looj, Packbot a Company History*. Web. 28 Nov. 2012. <http://www.irobot.com/global/en/explore_irobot/company_history.aspx>.

Photograph. *Air-way Sanitizer*. Airway Sanitizer Corp. Web. 27 Nov. 2012. <<http://airwayvac.com/history.html>>.

Photograph. *The Dustbuster: 1979*. 8 July 2010. Web. 28 Nov. 2012. <<http://www.idsa.org/dustbuster-1979>>.

Photograph. Web. 28 Nov. 2012. <http://www.google.com/imgres?um=1&hl=en&tbid=0&authuser=0&biw=1361&bih=691&tbn=isch&tbnid=Jc1GsSvPWHMRwM:&imgrefurl=http://felicdoniablog.blogspot.com/2007/mejores-50-gadgets-de-los-ultimos.html&docid=SCiRFu-e0bHmEM&imgurl=http://1.bp.blogspot.com/_ilwcZiFBYb8/R1jHfmR4fAI/AAAAAAAAABUM/6o52bh_hHxi/s400/31.jpg&w=320&h=288&ei=PUq2U>.

"Research Article: Vacuum Cleaner." *BookRags*. BookRags Inc. Web. 27 Nov. 2012. <<http://www.bookrags.com/research/vacuum-cleaner-wol/>>.

Seabrook, John. "How to Make It." *The New Yorker*. Condé Nast, 20 Sept. 2012. Web. 28 Nov. 2012. <http://www.newyorker.com/reporting/2010/09/20/100920fa_fact_seabrook>.

Spaarnestad. Photograph. Housewife with Carpet Beater. Web. 27 Nov. 2012. <<http://www.djibnet.com/photo/doormaat/luisvrouw-met-matteuklopper-housewife-with-carpet-beater-3281459404.html>>.

"The Dustbuster: 1979." *Industrial Designers Society of America*. 8 July 2012. Web. 28 Nov. 2012. <<http://www.idsa.org/dustbuster-1979>>.

"Vacuum Cleaners." *How Have Changed in 70 Years from The People History Site*. The People History, Web. 27 Nov. 2012. <<http://www.thepeoplehistory.com/vacuum.html>>.

"Vacuum Cleaner History - Invention of the Vacuum Cleaner." *Vacuum Cleaner History - Invention of the Vacuum Cleaner*. The Great Idea Finder, Web. 27 Nov. 2012. <<http://www.ideafinder.com/history/inventions/vacleaner.htm>>.

Attachment B: Artifacts submitted in response to item 3

Kendall Weihe

EGR 120

October 19, 2013

Journal Entry: An Inconvenient Truth

In Al Gore's *An Inconvenient Truth*, the "former next President of the United States" advocates the importance of Global Warming. The Academy Award winning film is full of exaggerated truths and pointless political drama.

While Vice President Gore has valid arguments about the seriousness of Global Warming, he fails to represent the logic of the opposing side. Al Gore repeatedly references the opposing political side of Global Warming as the, "so-called skeptics." As if the opposing side was skeptical about the factual evidence of Global Warming only because of their political allegiance. Looking at Global Warming from the opposing side, the logical argument questions the seriousness of Global Warming, not the existence. Yet, Gore repeatedly accuses the opposing side as simply, "denying the facts."

An Inconvenient Truth is packed full of twisted graphs. If the lay person was asked what graph stood out the most from the presentation, they would most likely answer the graph about the relationship of the amount of CO₂ in the Earth's atmosphere and the "resulting" temperature (I place "resulting" in quotation marks because, although Gore fails to present this in his speech, the temperature of the atmosphere depends on more than solely amounts of CO₂). This graph stood out to me the most as well, but not for the same reasons. The graph did not have any y-axis

scales. So perhaps the amount of CO₂ is projected to reach unfathomable quantities (as Gore puts it, "off the chart"), but the lack of scales fails to show the numerical temperature difference. Therefore, I am left questioning if the increased temperature difference will have any hazardous effects.

I do not deny the importance of Global Warming, but Albert Gore's political personality in presenting the controversy diminishes his argument.

Evan Adams
First Score: 6/10
Resubmission:

An inconvenient truth

In *An Inconvenient Truth*, Al Gore develops his theory of global warming/climate change. He uses many visual representations to get his points across to the audience. His argument is that global warming is real, and that humans should be concerned with their actions and the well-being of their planet. Gore's argument is fair and his points seem logical, however his representations are radical and exaggerated. For example, he shows a graph of the carbon dioxide in the atmosphere over the last few thousand years. The graph shows constant and low (according to the graph) levels of carbon dioxide in the past with a spike at the end of the graph, or the recent years to present day. The spike is so steep that anyone watching the presentation without previous knowledge of the topic would be baffled and emotionally influenced by the graph that Gore presented. However, the graph shows an unrealistic prediction for the late to present years. This explains how easily an audience can be influenced by fantastic visual representations that simply influence pathos (emotions) rather than logos (logic). People going to see a lecture or presentation on issues as disputed as global warming are much too often uneducated on the subject and are easily manipulated toward one argument. For this reason, it would behoove one to research a topic and gain some general understanding before attending or viewing a presentation on the topic, such as the one Gore put on.

Mary Hillwig
Journal over *The Great Climate Swindle*

I liked *The Great Climate Swindle*. While I feel it was out of portion in the same way that Al Gore's *An Inconvenient Truth* was, it was definitely refreshing to hear opinions from the other side of the climate debate. There was some truth that I agreed with in *The Great Climate Swindle*, however. My dad is a professor at a medical school in Eastern Kentucky, and the part of the movie that really resonated with me was the portion that showed scientists talking about funding research. I have seen the trials of getting grant money firsthand, so I can see what an attraction attaching "...for the study of global climate change" to a proposal for research money would pose. Even with some of these good points throughout the movie, overall there seemed to be misleading evidential arguments that detracted from the movie's persuasive effect. After researching the documentary, I found that several errors in research information came to light after the movie's release, and several of the scientists shown in the movie have come out saying that they feel they were not accurately portrayed. This makes me doubt the rest of the film's information, which is unfortunate because it is one of the only documentaries I have seen against the topic of global climate change. While I am glad that an opposing viewpoint for global warming was presented in this film, I am disappointed it was not done in a more researched and sophisticated manner.