Origin and Effects of Modern Technology

ID 480, Spring 2026

Instructor	Mark McKinnon	Phone	ТВА
Office Location	ТВА	Email	mckinnonm@lindsey.edu
Course Meeting Days and Time	Mon/Wed 17:00-18:15	Student Drop-In Office Hours	TBA
Course Mode	In person		

Course Information

Catalog Description:

Studies the development, the current place in society and the observed and potential benefits and threats of several 20th century technological innovations. The goal of this course is to create awareness within the student of the interaction within science, technology, and society. We will look at a variety of case studies, past and present, to try to identify these dynamics. Involves individual presentations and seminar discussions. Open to all majors.

Credit Hour Policy Statement:

Standard lecture: "This class meets the federal credit hour policy of 1 hour of class with an expected 2 hours of additional student work outside of class each week for approximately 15 weeks for each hour of credit, or a total of 45-75 total hours for each credit."

Course Learning Outcomes:

Our goal is for the student to become an educated skeptic in the science and the consumption of science and technology. This, in turn, will make the student a much more effective critic of modern technology and scientific information.

Required Materials:

All readings will be supplied on Blackboard. Make sure that you are up to date with how to access articles and electronic books through Blackboard.

Methods of Instructions:

Students will have weekly reading assignments and will supply written reactions to these writings. During this seminar style class, we will discuss these case studies at length and try to identify the impact that various scientific or technological breakthroughs have had on society and, conversely, the impact society has had on science and technology. In the second half of the semester, students will identify and supply articles on recent or emerging technologies and sciences for the group to analyze.

Withdrawal and Attendance policies:

The learning occurs during the class and through collaboration with your fellow students. Thus, you must attend the classes. Please, do not miss more than three classes. If you have conflicts with the current schedule, meet with the instructor during office hours ASAP.

The last to withdraw from the class is TBD.

Grading Criteria:

Course requirements:

- 1/3 Weekly reaction papers
- 1/3 Class participation
- 1/3 Term paper

Grades:

- A Satisfactorily meet the weekly reaction paper requirement,
 Satisfactorily meet the class participation requirement,
 Term paper complete and on time.
- **C** Failure to meet one of the above categories
- **F** Failure to meet two or more categories

Weekly reaction papers:

A short paper is due at the beginning of the first class of each week. The paper will be a 500 word (1-2 pages, single-spaced) personal reaction to the week's assigned reading. You must refer, in some way, to all of the week's required readings. The purpose of this is to make sure that you are prepared for the week's discussions. Your reaction may include opinions, questions (q's are encouraged), complaints, concerns and comments. If it is submitted by the start of class and it refers to all of the week's writings, it will be considered acceptable. Submission of 9 acceptable papers (out of the 12 possible) will be considered satisfactory completion of the requirement. You are encouraged to read everyone's submissions. It will improve the quality of our discussions

Class Participation:

"Good" class participation is defined as regular, quality contributions to the topics under consideration. This might include raising an important question, answering questions raised in class, relating course material to issues in your everyday life (e.g., illustrating a concept with a personal example), and providing an informed critique of course material. Off-the-cuff opinions generally are not quality contribution unless you can provide some support for them. This requires the student to come well prepared to class and keep his/her mind active. Curiosity is an especially good feature in a student and tends to lead to quality participation.

Additionally, each student will be responsible for leading one week's discussion. This means the student will pick the week's topic and find reading material for that topic. This must be prepared in advance so that these reading can be disseminated to the other participants at least one week before the assigned week. During the week, that student will lead and moderate the class discussion.

Satisfactory completion of the class participation requirement is achieved when the student provides "good" class participation in 90% of the class meetings and has fulfilled their responsibility of leading one week's discussion

Term Paper:

Analyze an issue within science and technology (e.g. area of research, new or upcoming technology, funding allocations, disaster investigation). Present the societal concerns that have arisen or may arise with this issue. This will be a 6-10 page paper, double-spaced. It is due by noon on Friday, April 17. Some examples of societal concerns include:

- 1. How does society finance science and technology?
- 2. Are populations culturally, politically, or economically shut off from access to these advances?
- 3. Are there religious or cultural upheavals that may occur due to these issues?
- 4. Are there competing forces at play regarding the progress of this science or technology? More details about this assignment will provide during the semester.

During the last week of the semester, we will review and discuss these papers as a class.

Honor Code:

All students at the University of Evansville agree to the University honor code: I will neither give nor receive unauthorized aid, nor will I tolerate an environment that condones the use of unauthorized aid.

Course AI Policy:

In this course, submission of any work that is not entirely your own is considered academic dishonesty unless otherwise specified. This means that the use of generative AI tools is prohibited, except for certain assignments for which you are given specific guidelines and examples of appropriate AI use. When permitted, you must clearly identify and cite the AI tools used. Submitting AI-generated work as your own constitutes a violation of academic integrity as an example of unauthorized aid.

The use of AI is actually encouraged. We need to become adept at using new technology. The best use of AI in this course is to request AI to provide examples of potential societal issues around technology, especially emerging tech. You are encouraged to use AI to help generate knowledge about these issues. However, once these issues have been introduced, it is up to you to: 1) verify that the information generated by AI is not an AI hallucination by confirming the information from other sources; 2) provide your own understanding of these issues in your own words and writing; and, finally, 3) properly cite the AI as generating this information (including the date generated and the URL used).

Course Schedule:

This schedule is tentative. Topics may be switched around or replaced as our discussions warrant. However, this is a sample of topics:

Week 1: Umbrella-ology – What is science?

Week 2: What happened to Vulcan? Intro to the Golem of Technology

Week 3: Reproducibility and replication in science – False claims

Week 4: The role of Science and Technology in Society and Governance

Week 5: Ethics – Academic Deviance – Tuskagee & Willowbrook – The vaccine crisis

Week 6: The rift between scientist, technologists, and regular people

Week 7: Global Warming

Week 8: Boom - Public Explosions - Challenger Space Shuttle - Nuclear Flask Train

Week 9: Experiments – Edible Memory – Cold Fusion – Neutrinos

Week 10 - 14: Students select and research topics for discussion

Week 15: Golem Science & Technology Conclusions

University Policy Statements

Disability Policy:

The University of Evansville is committed to providing an accessible and supportive environment for students with disabilities. It is the policy and practice of the University of Evansville to make reasonable accommodations for students with properly documented disabilities. Students should contact Disability Services at 812-488-2663 to seek services or accommodations for disabilities. Written notification to faculty from Disability Services is required for academic accommodations.

Institutional Equity and Title IX

UE is committed to fostering an atmosphere free from harassment and creating an inclusive campus for all members of the University community regardless of their sex, sexual orientation, gender identity, race, religion, ethnicity, country of origin, ability, or veteran status. All Faculty members are considered Responsible Employees and required to report instances of discrimination, harassment, or sexual violence to the Office of Institutional Equity

You may also choose to speak to a Confidential Resource about your experience. Confidential Resources at the University include:

Counseling Services: 812-488-2663, counselingservices@evansville.edu

Crayton E. and Ellen Mann Health Center: 812-488-2033, healthcenter@evansville.edu

Spiritual Formation Coordinator: 812- 488-5265, spiritualformation@evansville.edu

If you or someone you know has been harassed, assaulted, or discriminated against you can find the appropriate resources by contacting the Assistant Director of Institutional Equity and Title IX Coordinator: email titleix@evansville.edu; phone (812) 488-5261. For more information visit https://www.evansville.edu/offices/titleix/policy.cfm.

Non-discrimination Statement

The University of Evansville expects all members of its community to treat each other with respect and civility. Harassing behaviors directed towards any member of our community will not be tolerated. As part of its commitment to non-discrimination, the University specifically prohibits harassment based on any other characteristics set forth in its nondiscrimination statement as follows: including race, color, gender, gender identity and expression, sexual orientation, creed or religion, national origin, age, disability, veteran status and all federally protected groups/classes. Any form of harassment undermines the mission of the University and negatively impacts the University community as a whole. For more information contact the Center for Inclusive Excellence.

Campus Safety

All members of the UE community are automatically enrolled in the Ace Alerts Emergency Alert System. When the system is activated, emergency notification information is sent in the following manner: calls to campus IP phones, text messages, emails, campus housing speaker system, active threat sirens (non-weather related), digital signage, and AlertUS desktop on campus-owned computers.

To contact the Office of Public Safety:

Emergencies: 812-488-6911 **Non-emergencies:** 812-488-2051

Complaints, Grievances, and Appeals

The University of Evansville seeks to resolve all student concerns in a timely and effective manner through policies and processes documented in the University <u>Course Catalog</u> and <u>Student Handbook</u>.

Student Resources

Access the links below to connect with departments and resources that are here to support all UE students.

<u>Academic Services</u>: Contact the Center for Academic Advising to connect with academic support services including supplemental instruction, tutoring, and time management and study skills help.

Blackboard Guides: Blackboard is the University of Evansville's course management system for online courses. Guides on using Blackboard can be found within MyUE.

<u>Writing Center</u>: The Writing Center provides access to writing resources, appointments for one-on-one writing help, and assistance with any stage of the writing process.

<u>Counseling Services</u>: Counseling Services provides general, short-term counseling that assists students in identifying barriers and setting goals while improving coping strategies to achieve personal and academic goals.

<u>University Libraries</u>: Conduct research, access resources, and contact librarians for any research related help.