**General Education Course Inclusion Proposal**

**PERSPECTIVES ON SOCIETY**

**Course Name and Number: TE 351 Humanity and Technology**

**Home Department: Engineering Technology**

**Department Chair Name and Contact Information**: Michael Rudisill, 227.2141, mrudisil@nmu.edu

**Expected frequency of Offering of the course**: Every winter

**Official Course Status**: Has this course been approved by CUP and Senate?

**Overview of course** (please attach a current syllabus as well): *Please limit the overview to two pages (not including the syllabus)*

1. Overview of the course content

The objective of this course is to examine and analyze how modern science and technology has affected society, as well as how society has effected science and technology. It will utilize active participation and a hands-on environment to bridge several different venues of study regarding society’s interaction with science and technology. Several brief papers will be analyzed throughout the semester, and the class will discuss the content. Students will also debate different sides of using various technologies. By raising consciousness of the ethical issues facing those in scientific and technological fields, it will also serve to better prepare students for the workplace.

Perspectives on society are addressed through the analysis of how social issues or events influence technology and how technology has developed in the context of society, as well as addressing ethical issues in society. These themes will be addressed through class readings and discussions, as well as student papers, in-class debates, and examinations. Background or introductory themes include: historical perspectives on technology, social and political perspectives on technology, and ethical perspectives on technology. Various technologies will be addressed throughout the semester, such as: security technologies, surveillance technologies, artificial intelligence, robotics, nanotechnology, internet/social media, biotechnology, genetically modified organisms, energy technologies, etc.. Students will read and discuss the NSPE code of ethics during the class.

B. Explain why this course satisfies the Component specified and significantly addresses both learning outcomes

TE351 addresses learning outcomes for critical thinking and perspectives on society. Learning outcomes for critical thinking include the dimensions of evidence, integrate and evaluate. The perspectives on society rubric includes learning outcome dimensions of analysis of society, ethical issues, and development and context of society. Throughout the class we will be discussing the way society and technology impact each other’s development, as well as the ethical issues surrounding the use of specific technologies. Critical thinking will be fostered through class discussion periods and demonstrated through researched debates, a written essay, and exams.

During the semester, weekly readings will be assigned and discussed in class, covering topics such as the historical perspectives on technology and society, the social and political perspectives on technology and society, engineering ethics, security and war technologies, surveillance technologies, AI & robotics, nanotechnologies, the internet and social media, biotechnologies, genetically modified organisms, and energy. For all of these topics we will discuss the ways in which society impacts and is impacted by the technology, including any environmental and ethical issues surrounding the use of the technology. These discussions will address the “ethical issues” and “analysis of society” dimensions of the perspectives on society rubric.

Students will be assigned debate teams to argue the ethics and use of a technology, including its impacts on society. The class debate will assess the “ethical issues” and “analysis of society” dimensions of the perspectives on society rubric, as well as the “evidence” dimension of the critical thinking rubric. (See attached assignment and rubrics for links back to learning outcome assessments). This argumentative assignment will be on an assigned topic that is relevant to the course, such as cell phones and brain cancer, video games and violence, the use of drones, surveillance technologies, artificial intelligence, vaccinations, natural gas fracking, genetically modified organisms, and nuclear power. Students will work together in assigned teams to research one side of a controversial issue regarding technology and then argue (respectfully) against another team that has researched the opposing view during the assigned class period. Students are instructed to debate the ethical dilemmas, as well as the benefits and risks posed by the assigned technology. They are also instructed to argue whether we should use the technology as we do, or whether limits should be imposed (and how) on its use. Arguments should integrate and reasoning with existing popular understanding to lead the audience to informed conclusions or new understanding. Arguments should analyze impacts to society and how society is impacted by the technology. Arguments should address ethical issues created by the technology or its use. Before debating, students will hand in an outline of their arguments, including main and supporting points, as well as a reference list**.** The included assignment and rubric highlight links back to the dimensions assessed.

Students will also research and write a paper on the development of a technology within society, as well as the impact of that technology on their every day lives. These technology papers will assess the “integrate” and “evaluate” dimensions of the critical thinking rubric and the “development and context of society” dimension of the perspectives on society rubric. Students will select one technology to go without for 2 weeks. Suggestions include: Television (this means all video media), radio (all music media), your car, social media (facebook, twitter, etc.), phones (including cells, skype and all media for making audio calls), texting, etc. The selected topic must be approved by the class instructor. Students will also research this technology. Students are instructed to address the following in their papers:

* The history and development of this technology/media
* How it has been influenced by society and social issues
* How society and social issues have influenced this technology
* The impact this technology has on your daily life
* Explain to your audience why the sources you use are credible – what is their established expertise on the subject? Assess the quality of information that is integrated into your argument.

See the attached assignment and rubrics for links back to learning outcome assessments.

Finally, the class includes two exams and one final, worth 15% each, which will assess the perspectives on society rubric, and the critical thinking rubric through questions to be written each semester.

For all grade elements, the goal is 70% of students reaching the required proficiency level, as that is the general accreditation standard for ABET.

1. Describe the target audience (level, student groups, etc.)

TE531 is an upper level undergraduate course. Engineering Technology students take the course to meet an ethics component of education. This class is primarily based on assigned readings and research regarding various technologies which society has developed. The target audience includes students who will enter careers to develop or engineer technologies, as well as those who will implement their use, communicate the use of effects of technologies, and future regulators. The class is intended to develop the students ability to identify and analyze the was in which technology and society affect each other, as well as the ethical concerns regarding the development and implementation of various technologies, through reading, research, and critical thinking.

1. Give information on other roles this course may serve (e.g. University Requirement, required for a major(s), etc.)

Non-engineering technology majors select this course meet a general social science credit.

1. Provide any other information that may be relevant to the review of the course by GEC

Please see attached syllabus and assignments for class debate and technology paper (including rubrics).

**PLAN FOR LEARNING OUTCOMES
CRITICAL THINKING**

*Attainment of the CRITICAL THINKING Learning Outcome is required for courses in this component. There are several dimensions to this learning outcome. Please complete the following Plan for Assessment with information regarding course assignments (type, frequency, importance) that will be used by the department to assess the attainment of students in each of the dimensions of the learning outcome. Type refers to the types of assignments used for assessment such as written work, presentations, etc. Frequency refers to the number of assignments included such as a single paper or multiple papers. Importance refers to the relative emphasis or weight of the assignment to the entire course. For each dimension, please specify the expected success rate for students completing the course that meet the proficiency level and explain your reasoning. Please refer to the Critical Thinking Rubric for more information on student performance/proficiency in this area. Note that courses are expected to meaningfully address all dimensions of the learning outcome.*

|  |  |  |
| --- | --- | --- |
| **DIMENSION** | **WHAT IS BEING ASSESSED** | **PLAN FOR ASSESSMENT** |
| **Evidence** | Assesses quality of information that may be integrated into an argument | A researched debate will be assessed for the quality of information used to support an argument (see debate rubric). Each student will perform one debate per semester with an assigned team and topic. The debate will be worth 20% of the total class grade.  |
| **Integrate** | Integrates insight and or reasoning with existing understanding to reach informed conclusions and/or understanding | A written paper on the development of a technology, its impact on society, as well as its personal impacts will be assessed for the integrate dimension (see paper rubric). The paper will be worth 15% of the total grade and due at the end of the semester. |
| **Evaluate** | Evaluates information, ideas, and activities according to established principles and guidelines | A written paper on the development of a technology, its impact on society, as well as its personal impacts will be assessed for the evaluate dimension (see paper rubric). The paper will be worth 15% of the total grade and due at the end of the semester. |

**PLAN FOR LEARNING OUTCOMES
PERSPECTIVES ON SOCIETY**

*Attainment of the PERSPECTIVES ON SOCIETY Learning Outcome is required for courses in this component. There are several dimensions to this learning outcome. Please complete the following Plan for Assessment with information regarding course assignments (type, frequency, importance) that will be used by the department to assess the attainment of students in each of the dimensions of the learning outcome. Type refers to the types of assignments used for assessment such as written work, presentations, etc. Frequency refers to the number of assignments included such as a single paper or multiple papers. Importance refers to the relative emphasis or weight of the assignment to the entire course. For each dimension, please specify the expected success rate for students completing the course that meet the proficiency level and explain your reasoning. Please refer to the Rubric for more information on student performance/proficiency in this learning outcome. Note that courses are expected to meaningfully address all dimensions of the learning outcome.*

|  |  |  |
| --- | --- | --- |
| **DIMENSION** | **WHAT IS BEING ASSESSED** | **PLAN FOR ASSESSMENT** |
| **Analysis of society**  | Analysis of social issues, structures and processes or events | A researched debate will be assessed for the analysis of social issues with regards to a specific technology (see debate rubric). Each student will perform one debate per semester with an assigned team and topic. The debate will be worth 20% of the total class grade. |
| **Ethical Issues** | Addressing ethical issues in society | A researched debate will be assessed for the analysis of ethical issues with regards to a specific technology (see debate rubric). Each student will perform one debate per semester with an assigned team and topic. The debate will be worth 20% of the total class grade. |
| **Development and context of society** | Explore themes in the development of human society | A written paper on the development of a technology, its impact on society, as well as its personal impacts will be assessed for the development and context of society dimension (see paper rubric). The paper will be worth 15% of the total grade and due at the end of the semester.  |

Technology and Society – TE 351

Spring 2015

Course Information

Instructor: Dr. Michelle Jarvie-Eggart, Adjunct Assistant Professor

 Email: mejarvie@mtu.edu

 Phone: (906) 281-1872 9 am – 7 pm ONLY

Course Objectives: The objective of this course is to examine and analyze how modern science and technology has affected society, as well as how society has effected science and technology. It will utilize active participation and a hands-on environment to bridge several different venues of study regarding society’s interaction with science and technology. Several brief papers will be analyzed throughout the semester, and the class will discuss the content. Students will also debate different sides of using various technologies. By raising consciousness of the ethical issues facing those in scientific and technological fields, it will also serve to better prepare students for the workplace.

Textbooks: Textbook

 Winston, Morton & Ralph Edelbach. Society, Ethics, & Technology*. 5th ed.* Wadsworth Cangage Learning. 2014

 The publisher website: <http://www.cengagebrain.com>

 Has textbook rental and e-book options, which are MUCH less expensive than buying the physical text.

**Grading:**

**Attendance and Class Participation (20%)**

Punctual attendance is required. Unexcused absences are not acceptable, and will be penalized. If you must miss a class, please contact me in advance. If an emergency occurs, contact me as soon as you can. Additionally, please make every effort to arrive to class on time; important announcements will be made in the first few minutes of class.

Participation in classroom discussion is vital to full understanding of the material. Active listening is an integral part of participation as well. Your participation points are awarded based upon the quality of your contributions rather than the number of times you speak. There will also be in class assignments throughout the semester that will also account for this portion of your grade.

You are responsible for completing assigned reading **before** coming to class. Discussion will be based on these readings. It is important that you complete them so that you can fully participate in class.

**Exams (45%)**

There will be two exams throughout the semester and one final exam, worth 15% each. The exams will consist of a series of multiple choice and true/false questions and one or two short essay questions. The final exam will occur during finals week. It will be cumulative and will cover all material discussed in class, including the exams, lecture material, debate topics, and project material.

**Debate (20%)**

This argumentative assignment will be on an assigned topic that is relevant to the course. You will be assigned your debate topic, debate partner(s), and due date. You will work together to research one side of a controversial issue regarding technology and then argue (respectfully) against another team that has researched the opposing view during the assigned class period.

Your debate points should argue the ethical dilemmas, benefits and risks posed by the assigned technology. You should also argue whether we should use the technology as we do, or whether limits should be imposed (and how) on its use. Your teams will be assigned a “”pro” or “con” side of the issue.

**Technologies Paper (15%)**

You will select one technology to go without for 2 weeks. Suggestions include: Television (this means all video media), radio (all music media), your car, social media (facebook, twitter, etc.), phones (including cells, skype and all media for making audio calls), texting, etc. Be creative – this is not an exhaustive list. Your selection must be approved by the instructor. You will research and write a paper on the history and development of this technology/media, how it has affected society, how it has been influenced by society, and the impact it has on your daily life.

Your paper should be a minimum of ten pages, double-spaced. It should include a minimum of 6 academic references cited in your paper. You may use either APA or MLA style for referencing, as long as all information is provided to allow the reader to find the reference.

Any students who use the writing center for their paper, and bring a note from their writing coach indicating how you worked together will earn 5% extra credit on their paper. I suggest contacting the center early in the semester to arrange this help. <http://www.nmu.edu/writingcenter/>

**CLASS POLICIES**

Late work. Any assignment handed in after the deadline will have 10% deducted per school day late. An assignment is not considered handed in until a hardcopy is received by the instructor. Work will not be accepted over 1 week past due. If a personal emergency arises and you need an extension, please speak to me as soon as possible.

Respect. Please respect other peoples’ opinions as presented in class discussion, even if you do not agree with them. Debate is encouraged, but derogatory remarks aimed at another person will not be tolerated.

WebCT. WebCT may be used throughout the semester to post material relevant to the course. Do not submit assignments or email the instructor through WebCT, as it will not be checked for these items

Scale: A=(90-100), B=(80-89), C=(70-79), D=(60-69),F= <59

 For each set (0-2)=’-‘, and (7-9)=’+’, Normal Scale

## AMERICAN DISBILITY ACT

If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services Office (227-1550). Reasonable effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state and University guidelines.

Technology and Society - TE 351

(Lecture Tuesday & Thursday 3-4:40 pm, Room 122 JC)

|  |  |  |
| --- | --- | --- |
| **Week** | **Topics** | **Reading** |
| **1: 1/12** | Introduction & Debate Assignments  | Introduction: Children of Invention Revisited |
|  |  |  |
| **2: 1/19** | Historical Perspectives | 1.1.1-1.1.3 & Appendix Case 1 |
|  |  |  |
| **3: 1/26** | Social/Political Perspectives | 1.1.4, 1.2.1, 1.2.2 & Appendix Cases 12 & 15 |
|  | **Cell Phones & Cancer Debate - Thursday** |  |
| **4: 2/2** | Ethics |  |
|  | **Video Games & Violence Debate – Thursday** | 1.3.1–1.3.3 & Appendix Case 3 |
| **5: 2/9** | Ethics**EXAM 1 – Thursday** | Appendix B & Challenger Case Study <http://ethics.tamu.edu/Portals/3/Case%20Studies/Shuttle.pdf> |
|  |  |  |
| **6: 2/16** | Security & War | 2.1.1 & 2.1.2 & Case Studies on Drones: http://www.princeton.edu/~edzhou/morals.html |
|  | **Drones Debate – Thursday** |  |
| **7: 2/23** | Surveillance | 2.1.3 & 2.1.4 & Appendix Case 13 |
|  | **Privacy Debate – Thursday** |  |
| **8: 3/2** | Spring Break – No classes |  |
|  |  |  |
| **9: 3/9** | AI & Robots**AI Debate - Thursday** | 2.2.1 – 2.2.3 & Appendix Case 7 |
| **10: 3/16** | Nanotech **EXAM 2 – Thursday** | 2.3.1 – 2.3.3 & Appendix Cases 4 & 17 |
|  |  |  |
| **11: 3/23** | Internet & Social Media  | 2.4.1 – 2.4.3 & Appendix Case 11 |
| **12: 3/30** | Biotech | 2.5.1 – 2.5.3 & Appendix Case 2 |
|  | **Vaccination Debate - Thursday** |  |
| **13: 4/6** | Environment | 2.6.1 & 2.6.2 & Appendix Case 14 & 5 |
|  | **Fracking & Gas Debate – Thursday** |  |
| **14: 4/13** | GMOs | Readings Provided & Appendix Cases 8 & 9 |
|  | **GMO Safety Debate** |  |
| **15: 4/20** | Energy  | 2.6.3 & 2.6.4 & Appendix Cases 6, 16  |
|  | **Nuclear Power Debate – Thursday****Technologies paper due Thursday** |  |
| **16** | ***Final Exam*** Monday, April 27 2-4 pm |  |

**Technologies Paper (15% of your total grade):**

You will select one technology to go without for 2 weeks. Suggestions include: Television (this means all video media), radio (all music media), your car, social media (facebook, twitter, etc.), phones (including cells, skype and all media for making audio calls), texting, etc. Be creative – this is not an exhaustive list. Your selected topic must be approved by the class instructor.

Your paper should integrate insight and reasoning with existing understanding to reach informed conclusions and/or understanding. Through reasoned arguments and facts, your paper should address the following:

* The history and development of this technology/media
* How it has been influenced by society and social issues
* How society and social issues have influenced this technology
* The impact this technology has on your daily life
* Explain to your audience why the sources you use are credible – what is their established expertise on the subject? Assess the quality of information that is integrated into your argument.

**Format and References:**

Your paper should be a minimum of ten pages, double-spaced, 12 point font (not including a title or reference page). You must cite at least six primary academic references in your paper. These include peer-reviewed journal articles, publications from government agencies (like EPA, and NOAA). Published information from established NGOs (like the NRA or Sierra Club) may also be used. Consider the quality of information you cite. Use the most reputable sources and reliable information. You may use either APA or MLA style for referencing, as long as all information is provided to allow the reader to find the reference. Information accessed online should include the title, author, date the page was updated, URL, and access date. If it is an online version of a printed article or book, just cite it as a printed reference.

**Due Date:**

Your paper is due the last day of class.

**Writing Center:**

Any students who use the writing center for their paper, and bring a note from their writing coach indicating how you worked together will earn 5% extra credit on their paper. I suggest contacting the center early in the semester to arrange this help. <http://www.nmu.edu/writingcenter/>

**Library:**

Research resources for the library can be found at:

<http://www.nmu.edu/philosophy/node/34>

or you may go and speak with a librarian personally.

**Rubric**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **Exceeds Standard** | **Meets Standard** | **Nearly Meets Standard** | **Does Not meet Standard** |
| **Title Page 3%** | 3%: Paper Title, Your Name, Teacher’s Name, Course Title, Date, Neatly finished-no errors  | 2%: 4 of the 5 elements | 1%: 3 of the 5 elements | 0: 2 or less |
| **Thesis Statement 5%** | 5%: Clearly and concisely states the paper’s purpose in a single sentence, which is engaging, and thought provoking.  | 4%: Clearly states the paper’s purpose in a single sentence.  | 3%: States the paper’s purpose.  | 0: Incomplete or unfocused |
| **Introduction 10%** | 10%: The introduction is engaging, states the main topic and previews the structure of the paper. | 10-8%: States the main topic and previews the structure of the paper. | 8-5%: Does not adequately preview the structure of the paper.  | 0: There is no clear introduction or main topic.  |
| **Body 12%** | 12%: Each paragraph has thoughtful supporting detail sentences that develop the main idea.  | 12-9%: Each paragraph has sufficient supporting detail sentences that develop the main idea. | 9-6%: Each paragraph lacks supporting detail sentences.  | 0: Each paragraph fails to develop the main idea. |
| **Organization- Structural Development of the Idea 15%** | 15%: Writer demonstrates logical and subtle sequencing of ideas through well-developed paragraphs; transitions are used to enhance organization. Synthesizes ideas and information appropriate for purpose and clearly articulates either the thought process leading to the synthesis or the relationship between ideas and information. | 15-12%: Paragraph development present but not perfected. Synthesizes ideas and information appropriate for purpose. | 12-10%: Organization of ideas not fully developed. Synthesizes ideas and information, but minor errors exist in connection to main thesis. | 0: No evidence of structure or organization. Synthesis is incomplete, inappropriate, and/or lacking sufficient information for purpose.  |
| **Development and context of society****(20%)** | 20: Utilizes knowledge of historical and contemporary themes pertaining to human technological development in order to analyze thier effects within society and the natural world.  | 20-16% Identifies and examines historical and contemporary themes pertaining to human technological development and their effects within society and the natural world. | 16-10%: Identifies and examines some historical and contemporary themes pertaining to human technological development, but does not address their effects within society and the natural world.  | 0: % Fails to identify basic historical and contemporary themes pertaining to human technological development and their effects within society and the natural world. |
| **Conclusion 5%**  | 5%: The conclusion is engaging, restates the thesis, is logical and reflects informed evaluation and ability to utilize evidence, perspective and/or insight.  | 4%: The conclusion restates the thesis and is logically tied to an appropriate range of information and insight.  | 3%: Does not adequately restate the thesis. Conclusion is tied to information that is not clearly appropriate.  | 0: Conclusion is incomplete, unfocused, inconsistently tied to information.  |
| **Mechanics and usage 10%** | 10%: No errors in punctuation, capitalization, spelling, sentence structure and word usage. | 10-8%: Almost no errors in punctuation, capitalization spelling, sentence structure and word usage. | 8-5%: Many errors.  | 0: Numerous and distracting errors.  |
| **Citation 10%** | 10%: All cited works are done in the correct format with no errors. High quality, credible information directly related to topic is selected in order to develop a comprehensive analysis.  | 10-8%: Some cited works are done in the correct format. Information is credible and appropriate to support a coherent analysis.  | 8-5%: Few cited works are done in the correct format. Information is incomplete and/or not reputable. | 0: Absent |
| **Bibliography 10%** | 10% Done in the correct format with no errors. Includes more than 6 major references\*.  | 10-8%: Done in the correct format with few errors. . Includes 6 major references\*. | 8-5%: Some errors. Includes 5 major references\*.  | 0: Many errors. Includes 4 major references\*. |

\*(e.g. science journal articles, books, but no more than two internet sites. Periodicals available on-line are not considered internet sites.)

**Debate Assignment (20% of class grade)**

This argumentative assignment will be on an assigned topic that is relevant to the course. You will be assigned your debate topic, debate partner(s), and due date.

You will work together to research one side of a controversial issue regarding technology and then argue (respectfully) against another team that has researched the opposing view during the assigned class period.

Your debate points should argue the ethical dilemmas, benefits and risks posed by the assigned technology. You should also argue whether we should use the technology as we do, or whether limits should be imposed (and how) on its use. Your teams will be assigned a “”pro” or “con” side of the issue. Arguments should integrate and reasoning with existing popular understanding to lead the audience to informed conclusions or new understanding. Arguments should analyze impacts to society and how society is impacted by the technology. Arguments should address ethical issues created by the technology or its use. Use the four-step process for ethical decision making presented on page 17 of your text. **Just before your debate, you will hand in an outline of your arguments, including main and supporting points, as well as a reference list.**

**Organization of the debate:**

Yes/Pro states their case – 20 minutes

No/Con states their case – 20 minutes

Yes/Pro rebuttal – 10 minutes

No/Con rebuttal – 10 minutes

Class break – 10 minutes (work with your teams, use the restroom, etc.)

Yes/Pro open questions from the class – 10 minutes

No/Con open questions from the class– 10 minutes

Full class discussion and vote – 10 minutes

**References:**

You must cite at least three primary academic references during your debate These include peer-reviewed journal articles, publications from government agencies (like EPA, and NOAA). Published information from established NGOs (like the NRA or Sierra Club) may also be used. Consider the quality of information you cite. Use the most reputable sources and reliable information. Explain to your audience why the sources you use are credible – what is their established expertise on the subject?

**Professionalism:**

Your presentation should be academic and professional. This includes your speech and your dress. Do not call each other names, but respond to reasoned arguments. Do not interrupt each other, and only speak when it is your team’s turn to do so. Calmly present well-reasoned arguments. Dress as you would in an office environment, no baseball caps, exposed midriffs, etc. Consider this a chance to practice your professional appearance and manners.

**Rubric:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **Exceeds Standard** | **Meets Standard** | **Nearly Meets Standard** | **Does Not Meet Standard** |
| **Thesis Statement 5%** | 5%: Clearly and concisely states the team argument in a single sentence, which is engaging, and thought provoking.  | 4%: Clearly states the team argument in a single sentence.  | 3%: States the team argument  | 0: Fails to state the team argument. |
| **Evidence/Supporting information 20%** | 20%: High quality, credible information directly related to topic is selected in order to develop comprehensive analysis.  | 20-16%: Information is credible and appropriate to support development or a coherent analysis.  | 16-10%: Information is credible , but not appropriate to support development or a coherent analysis. | 0: Information is not appropriate and/or not reputable.  |
| **Analysis of Society 20%** | 20%: Develops a methodology for engaging as an individual or in collaboration to address social issues.  | 20-16%: Demonstrates ability to analyze major social issues, structures and processes or events.  | 16-10%: Identifies major social issues, structures and processes or events, but does not analyze | 0: Fails to demonstrate ability to analyze major social issues, structures and processes or events. |
| **Ethical Issues 20%** | 20%: Explains the impact of ethical issues within society. | 20-16%: Identifies ethical issues and their origins within society/technology. | 16-10%: Identifies ethical issues, but not their origins within society/technology. | 0: Fails to identify ethical issues facing society |
| **Rebuttal & Class Questions Responses 25%** | 25%: All counter-arguments were accurate, relevant and strong.  | 25-20% Most counter-arguments were accurate, relevant, and strong. | 20-13%: Some counter arguments were weak and irrelevant. | 0: Counter-arguments were not accurate and/or relevant. |
| **Respect for Other Team/professionalism 10%** | 10%: All statements, body language, and responses were respectful and were in appropriate language. Opened and closed the debate with a hand shake to opposition.  | 10-8: All statements, body language, and responses were respectful and were in appropriate language.  | 8-5: Statements, responses and/or body language were borderline appropriate. Some sarcastic remarks.  | 0:Statements, responses and/or body language were consistently not respectful. |