Team T 2017 Capstone Overview:

Capstone is an interdisciplinary group project designed to apply what students have learned in their CGS coursework over the past two years to real world issues and/or problems. Students are expected to submit a double-spaced, 50- page research paper on a topic from the list below and defend it before the Team T faculty in a two-hour oral defense. If students wish to supplement their papers with a developed app or documentary film, that will also be permissible. However, the latter will evaluated outside of, not during the oral defense. No extensions will be permitted. All individual research findings will be posted on e-portfolio. Each member of the group should create a tab on their e-portfolio where individual contributions, as well as the final project should be posted.

Format:

In addressing a topic, groups will assume the fictional identity of a relevant governing body or appropriate citizens advocacy lobby. For example, in the case of football-related head trauma, a group could take the identity of Concerned Parents Against Football Violence. By taking this hands-on approach, it is hoped students can gain a better understanding of the pros and cons of a particular issue and respond accordingly.

Schedule:

Capstone Kickoff: Friday, March 31 at 10:10 AM in room 505

First Faculty-Group Meetings: Week of April 3 (TBA)

Second Faculty-Group Meetings: Week of April 10 (TBA)

The purpose of these get togethers is to finalize project topics and to ask all relevant questions pertaining to the research, composition and sourcing of the paper. Additional meetings can be scheduled at the request of the individual group.

Completing the Capstone: Weeks of April 17 and April 24

During this critical fortnight, individual team faculty members will be available for office hours on a daily basis

Capstone Turn-In: Friday, April 28 at noon in the Jacob Sleeper Auditorium

Oral Defenses: Weeks of May 1 and May 8 (TBA)

Grading:

Students will be evaluated based on their individual contributions to the project, performance during the oral defense, the peer reviews of their fellow group members and the assigned letter grade to the finished paper. Each group member is responsible for understanding and being able to talk about all aspects of the project during the oral defense.

Sourcing:

Only references from credible newspaper, magazine, book, government, academic journal and social media sites will be acceptable. Oral interviews with relevant individuals pertaining to the subject matter are also strongly encouraged. All cited sources will be presented in a manner consistent with MLA style along with an annotated bibliography.

A Note on Plagiarism:

Any student/students found guilty of using unauthorized or uncredited portions of a work not their own will be disciplined to the fullest extent under the guidelines established by the University's Academic Conduct Code.

Capstone Topics: Team T

1. Regulation of domestic drones (Amazon, etc.)

The domestic use of drones is becoming an everyday part of American life. Yet as our skies fill with these sophisticated high tech flying craft, concerns are being raised about their use and overall purpose. While many applaud their potential for efficiently transporting goods over great distances, others cite worries over noise pollution, privacy and public safety. In looking to the immediate future, how should drone technology be regulated at the state and local level? What specific technological, environmental, ethical and/or legal concerns should be considered and how?

2. Football-related head trauma

Scientific research conducted by Boston University's CTE Center and the forensic pathologist Dr. Bennet Omalu of California has found an unsettling connection between playing football and the degenerative brain disease known as chronic traumatic encephalopathy (CTE). In your estimation, what specific measures need to be taken to address the issue at the youth, high school, collegiate and professional levels. Should serious consideration be given to banning the sport?

3. Sexual violence against women on campus

A 2015 survey by the Association of American Universities found that 23 percent of female college students had been victims of unwanted sexual contact. The ACLU has estimated that 95% of campus rapes go unreported. Investigate the issue of sexual violence at Boston University and what measures the university has taken in recent years to deal with the problem. Based on your findings, create your own group's plan for combating sexual violence against women on campus, to be delivered to the President of the university.

4. Unionization of college athletes

In 2014, a regional director for the National Labor Relations Board (NLRB) handed down a controversial decision giving Northwestern University football players the right to unionize over the protests of the National Collegiate Athletic Association (NCAA), which maintained student-athletes were being confused with regular school employees. Should the same right to bargain collectively be given to the athletes performing at Boston University? If yes, explain how this process will play out and what impacts this will have economically and academically on the university. If no, address why studentathletes, many of whom put in extracurricular hours the equivalent of an outside job, should not be properly financially compensated.

5. Solving the MBTA disaster

The Boston subway system is unreliable, expensive, inefficient and outdated. Fares are increasing despite all its problems, including its continuing use of aging equipment, such as one hundred year-old signals that have to be constantly repaired. Many of us experienced firsthand the unreliability of the system last winter, during the blizzards of February and March. What would it take to solve the problem of the T? Present a detailed plan to be presented to the Mayor of Boston.

6. Preparing Boston for the effects of climate change and rising sea levels

Thanks to climate change, a significant portion of Boston is expected is to be highly vulnerable to rising sea levels and flooding by the end of this century. What specifically can the city do to mitigate the damaging effects of such a potentially cataclysmic outcome? Your plan should address what needs to be done, how it could reasonably be funded and how you would gain the support of the local population.

7. Opioid Crisis

Despite decades of addiction treatment and research into addiction, understanding of the best ways to treat and deal with addiction problems remains elusive. Today Massachusetts faces a devastating opioid problem. The state government is currently issuing and implementing policies to reverse this, but experts remain divided on how to best deal with this issue and how to effectively treat the individuals that struggle with addiction. Address what the current scientific research tells us about addiction and what policies are being explored. Come up with a suggestion of a policy based on the scientific research that takes into account economic and political feasibility.

8. Gun control

"A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed." So says the Second Amendment to the Constitution. What kind of limits can or should be placed on gun ownership, given our country's sky-high rate of gun violence, and the fact that our civilian population is the most heavily armed in the world? Create a realistic, politically feasible gun control plan to be presented to Congress.

9. Public Health Regulation

Public health regulations, such as requirements that children are vaccinated before attending school, have faced opposition since they were first implemented over 100 years ago. However, it would be difficult to deny the effect these measures have had on improving health and life span. Today we continue to see opposition to these measures. Vaccination rates are falling due to movements that encourage parents to refuse vaccinations for their children. Other measures, such as water fluoridation, have also been questioned. On the other hand, public concerns about toxins have proven to have merit (for example, water in Flint Michigan or BPA found in water bottles and baby bottles) and have been subject to regulation. For this topic, you can focus on one aspect of public health regulations (vaccinations, toxins in water or food, or others) and come up with a plan to implement reasonable recommendations that will be ethically acceptable to the public and consider the overall impact on public health.

10. Guaranteed Minimum Income

Giving an annual sum of \$10,000 to all adult Americans regardless of whether they are employed or not might enable the elimination of all sorts of expensive welfare programs and could help lift millions of Americans out of poverty. The Guaranteed Minimum Income is an idea that finds increasing support not only among liberal thinkers, but many conservatives as well. Determine whether such a revolutionary idea would be economically and politically feasible, and whether it ought to be implemented, and present a detailed case for your conclusion.

11. Genetics and Ethics- Designer Babies

Our greater understanding of genetics has led to a number of medical improvements, however, it has also opened the door to a number of ethical questions. Perhaps one of the ones that makes us the most uncomfortable is the idea of designer babies. We now have the technology to potentially select certain traits in our offspring. This could be a very positive thing, if it is used to eliminate genetic disorders and lower the risk of disease. However, there is the concern that this technology could be used for other choices that are opposed by many, such as selecting eye color, height, athletic ability, and even having a child with three parents. These choices raise concerns about unintended consequences, both genetic and societal. Genes often control more than one aspect of a person- playing with these genes might result in less than desirable changes. There is also concern that this technology would be available only to the rich, exacerbating a gap between the rich and poor. Since this technology is so new, little legislation exists that would regulate how this technology is used. For this topic, design a comprehensive piece of legislation that would outline regulations and justification for those regulations.

12. Regulation of supplements and performance enhancing drugs

Tennis player Maria Sharapova recently tested positive for the drug melodium, a drug that is used to increase circulation and thereby enhance athletic performance. This is only one example of the many times drugs for performance enhancement have been in the news. Many of these drugs are legal, but banned for use by athletes competing in high profile events. Other drugs known as dietary or nutritional supplements are regulated under different laws than other drugs. These often include claims that are not substantiated by independent research. For this topic, describe categories of drugs that

might be used by athletes and the limitations around the regulation and current definitions for these drugs. Design a comprehensive policy to regulate the use of performance enhancing drugs at a governmental level for all citizens and at a more narrow level for athletes.

13. The use of neurological drugs

In the past few decades, there has been a substantial uptick in the use of drugs to treat neurological conditions such as ADHD and depression. This has not been without controversy. Critics of drugs to treat ADHD, such as Adderall, point to the fact that these drugs have potential ill effects including reduction in adult height and personality changes that are not fully understood. Antidepressant critics point to a possible connection with increased suicide and the fact that full effects of these drugs are not understood. For this topic, suggest a guideline that could be used by medical professionals in prescribing these kinds of drugs. You should address the concerns of critics (listed above and others), the economic and social costs of these drugs and off label uses that result from widespread prescriptions being available.

14. Cloning- food production; lab meat

The world population is projected to reach nearly 10 billion by 2050. In light of this figure, many are concerned about how to feed such a large population. Some ideas that have been put forward include genetic modification of food, cloning and production of lab meat. With these new technologies come risks. For this topic, develop a policy that would regulate new types of food sources. Be sure to take into account the willingness of people to consume these new food sources, potential costs (and how they could be brought down to make the food source reasonable), and health/environmental risks.

15. Animal rights- legal rights (chimpanzee case)

Animals are afforded certain protections under current law, but many activists argue that these laws do not go far enough. Some groups are proposing a shift in both legal rights and the cultural conception of an animal as a legal entity. This would comprise of a shift from the definition of an animal (or certain animals) from a 'thing' to a 'non-human person.' For this topic, develop a legal definition and then defend your reasoning. Design legislation that would address various complications that arise with a redefinition of the status of certain animals.

16. BU as a "Sanctuary Campus for Immigration and Travel Ban

There have been recent calls for Boston University to become a "sanctuary campus" for those members of the university community at risk of being deported by federal authorities. Depending on your point of view, what steps as an institution should BU take moving forward to address this controversial issue?

17. Legalized Marijuana on University Campuses

Marijuana for recreational usage purposes is now legal in Massachusetts, but colleges and universities such as BU are exempt from the state law. Should the latter be reexamined to allow the once universally banned drug on campuses?

18. Electoral College Reform

The elevation of former real estate mogul and reality television star Donald J. Trump to the White House has brought close scrutiny to our country's centuries-old electoral college system of selecting presidents. What changes, if any, are needed to modernize the process and make it consistent with our constitutional and legal traditions?

19. BU Faculty and Student Diversity

BU has come under heavy criticism over the years for not having a diverse enough faculty and student body. What specific actions are needed to correct the situation and make the campus more inclusive?

20. MLK Memorial

The late civil rights leader and Nobel Peace Prize winner Dr. Martin Luther King Jr. was a major national and international figure in the late 1950s and 1960s. Yet here in Boston-where King spent several formative years-there is no major monument in his memory outside of an obscure sculpture in front of Marsh Chapel here on campus. If you had the opportunity to create a significant public memorial in Dr. King's honor, what would you design and where in the city would you locate it? A close understanding of Dr. King's life and enduring historical legacy will be required.

21. Gene Editing with CRISPR

Precision Medicine is the future of medical care. CRISPR technology has opened the door for faster, more accurate and cheaper gene editing. However, it has raised some ethical questions. Since this technology is so new, little legislation exists that would regulate how this technology is used. For this topic, you may want to analyze proposed legislation that some jurisdictions are considering.

22. Voter ID Laws

Several states, including neighboring New Hampshire, have passed voter ID laws which requires individuals to show proof of citizenship through photo identification cards or other official means. The stated purpose behind the legislation is to avoid potential voter fraud. Should Massachusetts adopt a similar law?

23. Recidivism in Massachusetts

Statistically speaking, half of incarcerated individuals now leaving the Massachusetts state prison system wind up back behind bars in relatively short amount of time. What can and should be done to end this alarming recidivism rate?