**Hong Kong Shue Yan University**

**Department of English Language & Literature**

Master of Arts in Interdisciplinary Cultural Studies

2015-2016

**Course Title** : Science, Technology and Culture

**Course Code** : ENG 508

**Year of Study** : N/A

**Number of Credits** : 3

**Duration in Weeks** : 13

**Contact Hours Per Week** :Lecture (2 Hours)

: Tutorial (1 Hour)

**Pre-requisite(s)** : NIL

**Prepared by** : Dr. Amy CHAN

Course Description

This course explores the impact of the worldwide technoscience revolution of our era in the cultural context in response to the advent of technology and science in the past two centuries. Special emphasis will be put on the interaction and reciprocation between technology and society. As witness to this important moment, we have a vantage point to review the cultural impact of technology on social, economic, political development since the industrial revolution in the 18th century. Through readings of critical theories by social critics and philosophers, the course will analyse some dominant themes of technoscience culture and society, such as posthumanism and humanity, bioengineering and ethics, feminist science studies, and digital-game based teaching and learning.

**Course Outcomes, Teaching Activities and Assessment**

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| **Course Intended Learning Outcomes (ILOs)** |
| Upon completion of this course students should be able to: |
| **ILO1** | articulate the critical issues of technoscience culture |
| **ILO2** | describe how our sense of identity and our society are shaped by technology, science and mass media |
| **ILO3** | analyse the elements tied to the scientific contexts critically |
| **ILO4** | demonstrate an understanding of critical concepts of technoscience culture by using concrete examples from cultural texts |
| **ILO5** | synthesize critical concepts of technoscience culture and our everyday life practice |
| **ILO6** | write critically on a specific issue in the field of technoscience culture studies with illustration from cultural texts |

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| **Teaching and Learning Activities (TLAs)** |
| **TLA1** | introduction of relevant issues |
| **TLA2** | critical reading of assigned texts |
| **TLA3** | explanation of critical concepts |
| **TLA4** | illustration of critical concepts and issues with daily examples and multimedia materials |
| **TLA5** | in-class discussion |
| **TLA6** | online discussion  |
| **TLA7** | oral presentations by students |
| **TLA8** | writing of term paper |

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| **Assessment Tasks (ATs)** |
| **AT1** | In-class discussion*Students are to respond actively to specific questions made by the lecturer as well as participate in class discussion in either in lecture or tutorial*. | 10% |
| **AT2** | Oral presentation*In a group of 3-4, students are to deliver an oral presentation on a specific topic which can demonstrate their understanding of the issue(s) and concepts(s) discussed in this course. Also, at the end of the presentation there will be time for class discussion.* | 30% |
| **AT3** | Online discussion *Students are to take part in online discussion. Specific topics/ questions will be posted on the online teaching and learning platform.* | 20% |
| **AT4** | Term paper*Students are to write a research paper which can demonstrate a solid grasp of issue(s) and concept(s) taught in the course. The research paper has to be a critical analysis of specific topic and adopt a problem-solving approach which can demonstrate students’ ability of critical thinking and analysis.* | 40% |
|  | TOTAL | 100% |

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| **Alignment of Course Intended Learning Outcomes, Teaching and Learning Activities and Assessment Tasks**  |
| **Course Intended Learning Outcomes** | **Teaching and Learning Activities** | **Assessment Tasks** |
| TLO1 | TLA1,2,3 | AT1,3 |
| TLO2 | TLA1,2,3,4 | AT1,3 |
| TLO3 | TLA3,5,6 | AT1,2,4 |
| TLO4 | TLA3,5,7,8 | AT2,3,4 |
| TLO5 | TLA5,6,7,8 | AT2,4 |
| TLO6 | TLA6,8 | AT3,4 |

**Course Outline**

**Week 1 Introduction to the Course**

Michael, Mike. (2006) “Between Technoscience and Everyday Life,” “Versions of Everyday Life and Technoscience.” *Technoscience and Everyday Life: The Complex Simplicities of the Mundane*. Maidenhead: Open University Press. pp.1-40.

Poster, Mark. (1996) “Postmodern Virtualities.” *FutureNatural: Nature, science, culture*. Ed. George Robertson et al. London and New York: Routledge. pp.23-42.

References: *Metropolis* (movie)

**Week 2 Technoscience Culture and the Society**

Sismondo, Sergio. (2010) “The public Understanding of Science,” “Expertise and Public Participation,” “Political Economics of Knowledge.” *An Introduction to Science and Technology Studies*. 2nd edition. Malden: Wiley-Blackwell. 168-204.

Flower J. Michael. (2001) “Technoscientific Literacy as Civic Engagement.” *Feminist Science Studies: A New Generation*. Ed. Maralee Mayberry, Banu Subramaniam, Lisa H. Weasel. New York & London: Routledge. pp. 63-71.

Reference: *Modern Time* (movie)

**Week 3 Media Culture and Everyday Life**

Jenkins, Henry. (2009) “Buying into American Idol: How We Are Being Sold on Reality Television.” *Reality TV: Remaking Television Culture*. Eds. Susan Murray and Laurie Ouellette. New York: New York University Press. pp. 343-362.

Murphie, Andrew & Potts, John. (2003) “Digital Aesthetics: Cultural Effects of New Media Technologies.” *Culture & Technology*. New York: Palgrave. pp. 66-94.

Reference: *The Net* (movie), *S1M0ne* (movie) and *Truman Show* (movie)

**Week 4 Cyberspace and Virtual Reality**

Benedikt, Michael. (2000) “Cyberspace: First Steps.” *Cybercultures Reader*. Ed. David Bell. London: Routledge. pp.29-44.

Turkle, Sherry. (2002) "Constructions and Reconstructions of the Self in Virtual Reality." Cyber\_Reader: Critical writings for the Digital Era. Ed. Neil Spitler. London: Phaidon. pp. 208-215.

Philip K. Dick, “We Can Remember it for You Wholesale”

Reference: *The Matrix* trilogy (movie), *The Lawnmower Man* (movie)

**Week 5 Posthumanism and Postmodern Urbanscapes**

*Blade Runner, The Final Cut* (movie) 117 mins

Wong, Kin Yuen. (2000) “On the Edge of Spaces: Hong Kong Cityscape, *Blade Runner, Ghost in the Shell*” in *Science Fiction Studies*, Vol. 27, Part 1 March 2000. pp.1-21.

Keywords: Posthuman, Postmodern urbanscape, Artificial intelligence

**Week 6 Posthumanism and Cyberbodies**

Murphie, Andres and Potts, John. (2002) "Cyborgs: the Body, Information and Technology". *Culture & Technology*. New York: Palgrave. pp. 115-141.

Gray, Chris Hables (2001) "Infomedicine and the New Body" and "Cybernetic Human Reproduction". *Cyborg Citizen: Politics in the Posthuman Age*. New York and London: Routledge. pp. 69-98.

Brian Aldiss, “Super-Toys Last All Summer Long”

**Week 7 Technoscience and Gender**

Evelyn Fox Keller. (2001) "Gender and Science: An Update." *A Reader in Feminist Science Studies: Women, Science, and Technology*. Eds. Mary Wyer et al. New York: Routledge. pp.132-142.

Stabile, Carol. (2001) “Shooting the Mother: Fetal Photography and the Politics of Disappearance.” *The Visible Woman: Imaging Technologies, Gender, and Science*. Eds. Paula A. Treichler, Lisa Cartwright and Constance Penley. New York and London: New York University Press. pp. 171-197.

Hartouni, Valerie. (2001) “Fetal Exposures: Abortion Politics and the Optics of Allusion.” *The Visible Woman: Imaging Technologies, Gender, and Science*. Eds. Paula A. Treichler, Lisa Cartwright and Constance Penley. New York and London: New York University Press. pp. 198-216.

**Week 8 Cyberfeminism**

Haraway, Donna. (1991) “A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century.” *Simians, Cyborgs, and Women: The Reinvention of Nature*. London: Routledge. pp. 149-181.

Lykke, Nina. (1996) “Between Monsters, Goddesses and Cyborgs: Feminist Confrontations with Science.” *Between Monsters, Goddesses and Cyborgs: Feminist Confrontations with Science, Medicine and Cyberspace*. Eds. Nina Lykke and Rosi Braidotti. London & New Jersey: Zed Books. pp. 13-29.

Shariann Lewitt, “A Real Girl”

**Week 9 Feminist Study of Science**

Jones, Leslie S. & Scantlebury, Kathryn. (2001) “Feminist Leadership in the Academy.” *Feminist Science Studies: A New Generation*. Ed. Maralee Mayberry, Banu Subramaniam, Lisa H. Weasel. New York & London: Routledge. pp. 138-144.

Pursell, Carroll. (2001) “Feminism and the Rethinking of the History of Technology.” *Feminism in Twentieth-Century Science, Technology, and Medicine*. Eds. Angela N.H. Creager, Elizabeth Lunbeck & Londa Schiebinger. Chicago and London: The University of Chicago Press. pp. 113-127.

**Week 10 Environment, Technology and Ecofeminism**

Kothari, Rajini. (2010) “Environment, Technology, and Ethics.” *Technology and Values: Essential Readings*. Malden: Blackwell. pp. 431-437.

Merchant, Carolyn. (1995) “The Death of Nature: Women and Ecology in the Scientific Revolution.” *Earthcare: Women and the Environment*. New York: Routledge. pp. 75-90.

**Week 11 Digital Game Culture**

Giddings, Seth. (2007) “Playing with Non-Humans: Digital Games as Technocultural Form.” *Worlds in Play: International Perspectives on Digital Games Research*. Eds. Suzanne de Castell and Jennifer Jenson. New York: Peter Lang. pp. 115-128.

Taylor, T.L. (2011) “Gaming Lifeworlds: Social Play in Persistent Environments.” *The New Media and Technocultures Reader*. Eds. Seth Giddings with Martin Lister. London & New York: Routledge. pp. 369-393.

 Jorge Luis Borges, “The Circular Ruins” from *Labyrinths*

**Week 12 Paradigm Shift in Science**

Laszlo, Ervin. (2006) “The Amazing Coherence of (Nearly) Everything*.” Science and the Reenchantment of the Cosmos: The Rise of the Integral Vision of Reality*. Rochester: Inner Traditions. pp. 6-22.

Laszlo, Ervin. (2008). *Quantum Shift in the Global Brain: How the New Scientific Reality Can Change Us and Our World*. Rochester: Inner Traditions. pp. 88-127.

**Week 13 Student Presentation**

**Academic Honesty**

You are expected to do your own work. Dishonesty in fulfilling any assignment undermines the learning process and the integrity of your college degree. Engaging in dishonest or unethical behavior is forbidden and will result in disciplinary action, specifically a failing grade on the assignment with no opportunity for resubmission. A second infraction will result in an F for the course and a report to College officials. Examples of prohibited behavior are:

* Cheating – an act of deception by which a student misleadingly demonstrates that s/he has mastered information on an academic exercise. Examples include:
* Copying or allowing another to copy a test, quiz, paper, or project
* Submitting a paper or major portions of a paper that has been previously submitted for another class without permission of the current instructor
* Turning in written assignments that are not your own work (including homework)
* Plagiarism – the act of representing the work of another as one’s own without giving credit.
	+ Failing to give credit for ideas and material taken from others
	+ Representing another’s artistic or scholarly work as one’s own
* Fabrication – the intentional use of invented information or the falsification of research or other findings with the intent to deceive

**To comply with the University’s policy, all written assignments have to be submitted to VeriGuide.**

**Resources**

**Primary Texts**

Benford, Gregory & Malartre, Elisabeth. (2007) *Beyond Human: Living with Robots and Cyborgs*. New York: Tom Doherty Associates Book.

Creager, Angela N.H., Lunbeck, Elizabeth & Schiebinger, Londa, eds. (2001) *Feminism in Twentieth-Century Science, Technology, and Medicine*. Chicago and London: The University of Chicago Press.

De Castell, Suzanne & Jenson, Jennifer, eds. (2007 *Worlds in Play: International Perspectives on Digital Games Research*. New York: Peter Lang.

Giddings, Seth & Lister, Martin, eds. (2011) *The New Media and Technocultures Reader*. London & New York: Routledge.

Gray, Chris Hables. (2001) *Cyborg Citizen: Politics in the Posthuman Age*. New York and London: Routledge.

Haraway, Donna J. (1991) *Simians, Cyborgs, and Women: The Reinvention of Nature*. London & New York: Routledge.

Kahne, Joseph, Middaugh, Ellen & Evans, Chris. (2009) *The Civic Potential of Video Games*. Kindle Version.

Kothari, Rajini. (2010) *Technology and Values: Essential Readings*. Malden: Blackwell.

Laszlo, Ervin. (2008). *Quantum Shift in the Global Brain: How the New Scientific Reality Can Change Us and Our World*. Rochester: Inner Traditions.

Laszlo, Ervin. *Science and the Reenchantment of the Cosmos: The Rise of the Integral Vision of Reality*. Rochester: Inner Traditions.

Mayberry, Maralee, Subramaniam, Banu & Weasel, Lisa H., eds. (2001) *Feminist Science Studies: A New Generation*. New York & London: Routledge.

Merchant, Carolyn. (1995) *Earthcare: Women and the Environment*. New York: Routledge.

Michael, Mike. (2006) *Technoscience and Everyday Life: The Complex Simplicities of the Mundane*. Maidenhead: Open University Press.

 Murphie, Andres & Potts, John. (2002) *Culture & Technology*. New York: Palgrave.

Murphie, Andrew & Potts, John. (2003) *Culture & Technology*. New York: Palgrave.

Murray, Susan & Ouellette, Laurie, eds. (2009) *Reality TV: Remaking Television Culture*. New York: New York University Press.

Prensky, Marc. (2001*Digital Game-Based Learning*. Minnesota: Paragon House.

Rajan, Kaushik Sunder, (2006) *Biocapital: The Constitution of Postgenomic Life*. Durham: Duke University Press.

Robertson, George. (1996) *FutureNatural: Nature, science, culture*. London and New York: Routledge.

Singerland, Edward. (2008) *What Science Offers the Humanities: Integrating Body and Culture*. New York: Cambridge University Press.

Sismondo, Sergio. (2010) *An Introduction to Science and Technology Studies*. 2nd edition. Malden: Wiley-Blackwell.

Terry, Jennifer & Calvert, Melodie, eds. (1997) *Processed Lives: Gender and Technology in Everyday Life*. London and New York: Routledge.

Thacker, Eugene. (2005) *The Global Genome: Biotechnology, Politics, and Culture*. London: The MIT Press.

Tofts, Darren, Jonson, Annemarie & Cavallaro, Alessio, eds. (2002) *Prefiguring Cyberculture: An Intellectual History*. London: MIT Press.

Treichler, Paula A., Cartwright, Lisa & Penley, Constance, eds. (2001) *The Visible Woman: Imaging Technologies, Gender, and Science*. New York and London: New York University Press.