SOCI 5209

SOCIOLOGY OF SCIENCE AND TECHNOLOGY

Winter 2025

Thursday: 11:35pm – 2:25pm

Method of Delivery: In Person

Instructor: Dr. Carlos Novas

Email: carlos.novas@carleton.ca

Office Hours: Thursday 9:30-11:00am or by appointment

Just send me an email and we can arrange to meet over Zoom or in-person. I'm also in my office (Loeb C779) on campus daily – please feel free to drop by.

In this course, you are expected to learn from your texts, your teacher and from one another. This requires striving towards understanding each other but it does not imply striving towards finding agreement. Our class will be racially, religiously, politically, culturally, generationally, and economically diverse. We will be of different gender identifications and sexual orientations and our lived experiences and reactions to the course material will reflect this diversity. Sharing our perspectives and interpretations on the course material will enhance everyone's learning experience and you are encouraged to openly express any disagreements with the authors you will read, with your fellow classmates, or with the Professor in the different participation fora that are available for this course. However, you are expected to conduct yourself in such a way that shows the utmost respect to others who may – or may not – share your views. Derogatory comments and hateful behavior towards others (and their views) will not be tolerated.

Carleton University acknowledges the location of its campus on the traditional, unceded territories of the Algonquin nation. In doing so, Carleton acknowledges it has a responsibility to the Algonquin people and a responsibility to adhere to Algonquin cultural protocols.

COURSE DESCRIPTION

This seminar introduces students to the field of science and technology studies (STS). The course concentrates on exposing students to the major theoretical developments and trends in this interdisciplinary field of sociological and anthropological inquiry. Over the course of the term, we will critically reflect upon and discuss some of the foundational texts and more recent scholarship within the field of STS. Students will be encouraged to examine prevalent methods used in the study of science and technology laden contexts. One of the key objectives of this course is to help students understand how science and technology shape and is shaped by material cultures, as well as a range of economic, political and social processes.

Each class will primarily consist of seminar discussions in relation to the required readings and weekly reading reports.

REQUIRED TEXT

Although there are no required textbooks for the seminar, students may consider purchasing the following books. All course material is available on Brightspace. Textbook costs: $0

Hess, David J. 1997. *Science Studies: An Advanced Introduction*. New York: New York University.

Sismondo, Sergio (2010) *An introduction to science and technology studies* (Malden, MA: Wiley-Blackwell).

ASSIGNMENTS

Seminar participation: 20%

In order to ensure the success of the seminar, students should attend every class and actively contribute to seminar discussions. Students should come prepared to each seminar by reading all the required texts prior to attending class.

As part of seminar participation, students will be required to read the weekly reading reports prepared by other members of the class. You should be prepared to discuss your weekly reading report and to discuss topics or issues raised in reading reports of fellow classmates.

Reading Reports: 30% (5 x 6%)

For each class, students will be required to prepare a brief reading report (approximately 1 page) on the week's set of readings (i.e., you are NOT expected to write a report for each article). Out of eleven possible weeks, you must submit a minimum of 5 reports. The top 5 grades will count towards your final grade.

The reading reports should be sent electronically to the rest of the class the DAY BEFORE the seminar (before midnight at the latest), since they will form the basis of our weekly discussion and debate. A bulletin board on Brightspace will be set up to facilitate this exchange of ideas. You should read the reports of your fellow classmates and be prepared for comment/critique.

In your reading report, please include:

- One to two 'reactions' – What did you think of the articles? What struck you the most about the readings?
- One to two 'keepers' – What were the key ideas worth remembering and making note of? What did you take away the most from the readings?
- One to two 'questions' – What quibbles, questions or criticisms did you have for the author(s)?
- One 'so what' – Why does the topic matter? How does it contribute to our study of science and technology?
- How do the articles help us think about the methods or archives that we can use to study science or technology?

Research Proposal: 15%

In preparation for the final research project students are required to submit a proposal (no more than 1500-2000 words, not including bibliography) related to their research project. The project proposal should provide a brief description of the scientific debate, controversy or technology that the student wishes to study. The proposal should then go on to offer an explanation of the STS or sociological significance of this controversy, debate, or technology. Lastly, the proposal should describe some of the resources that the student will use to conduct research on their chosen topic. Students can work on topics related to their MA or PhD research.

Research paper: **35%**

As part of the course requirements, students are required to submit a research paper. This paper can focus on either a scientific debate/controversy or on the sociological significance of a particular technology. Students should choose topics related to the course themes and that are relevant to their current and future research interests. The research paper should be around 5000 to 5500 words in length, not including bibliography and references.

DEADLINES AND RETURN OF STUDENT'S WORK

Seminar Participation	**N/A**
Weekly Reading Reports	**Wednesday before midnight**
Proposal	**March 10, 2025**
Research paper:	**April 8, 2025**

All deadlines are firm and are included in the course schedule below. Written work is to be submitted on Brightspace.

Late submissions will be penalized 3% every day. No submissions will be accepted or graded after the last day of term, April 8, 2025.

All assignments will be returned to students within 10 days of submission or earlier.

Citation Style

The Chicago author-date citation style (17th edition) is to be used in the assignments and papers of this course. For more information, please see:
https://www.chicagomanualofstyle.org/tools_citationguide/citation-guide-2.html

GRADES

In accordance with the Carleton University Undergraduate Calendar Regulations, the letter grades assigned in this course will have the following percentage equivalents:

A+ = 90-100	B+ = 77-79	C+ = 67-69	D+ = 57-59
A = 85-89	B = 73-76	C = 63-66	D = 53-56
A - = 80-84	B - = 70-72	C - = 60-62	D - = 50-52
F = Below 50	WDN = Withdrawn from the course		DEF = Deferred

COURSE SCHEDULE

WEEK 1: COURSE INTRODUCTION

January 9

Required Reading: None

This class will be oriented around getting to know one another and sharing our research interests.

WEEK 2: WHAT IS STS

January 16

Required Reading:

Pinch, Trevor (2007) 'The sociology of science and technology', in Clifton D. Bryant and Dennis L. Peck (eds), *21st century sociology: a reference handbook* (Thousand Oaks, CA: Sage): 266-75.

Law, John (2008) 'On sociology and STS', *The Sociological Review* 56/4: 623-49.

Franklin, Sarah (1995) 'Science as culture, cultures of science', *Annual Review of Anthropology* 24: 163-84.

Supplementary reading:

Hess, David (1997) 'If you're thinking of living in STS… A guide for the perplexed', in Gary Lee Downey and Joseph Dumit (eds), *Cyborgs and Citadels: Anthropological Interventions in Emerging Sciences and Technologies* (Santa Fe: SAR Press): 143-64.

Rouse, Joseph (1993) 'What are cultural studies of scientific knowledge?', *Configurations* 1/1: 1-21.

Star, Susan Leigh (1988) 'Introduction: The Sociology of Science and Technology', *Social Problems* 35/3: 197-205.

Traweek, S. (1993) 'An introduction to cultural, gender, and social studies of science and technologies', *Culture Medicine and Psychiatry* 17/1 (Mar): 3-25.

WEEK 3: DEMARCATING SCIENCE FROM NON-SCIENCE: MAKING BOUNDARIES

January 23

Required Reading:

Gieryn, Thomas F. (1983) 'Boundary-Work and the Demarcation of Science from Non-Science: Strains and Interests in Professional Ideologies of Scientists', *American Sociological Review* 48/6: 781-95.

Jasanoff, Sheila S. (1987) 'Contested Boundaries in Policy-Relevant Science', *Social Studies of Science* 17/2: 195-230.

Wainwright, Steven P., Williams, Clare, Michael, Mike, Farsides, Bobbie and Cribb, Alan (2006) 'Ethical boundary-work in the embryonic stem cell laboratory', *Sociology of Health & Illness* 28/6: 732-48.

Supplementary reading:

Lamont, Michèle and Molnár, Virág (2002) 'The study of boundaries in the social sciences', *Annual Review of Sociology* 28/1: 167-95.

Collins, Harry M. and Pinch, Trevor J. (1979) 'The Construction of the Paranormal: Nothing Unscientific is Happening', in Roy Wallis (ed), *On the margins of science: the social construction of rejected knowledge* (Keele: University of Keele): 237-69.

Star, Susan Leigh and Griesemer, James R. (1989) 'Institutional Ecology, 'Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39', *Social Studies of Science* 19/3: 387-420.

Amsterdamska, Olga (2005) 'Demarcating Epidemiology', *Science, Technology & Human Values* 30/1: 17-51.

Bala, Arun and Gheverghese Joseph, George (2007) 'Indigenous knowledge and western science: the possibility of dialogue', *Race & Class* 49/1: 39-61

WEEK 4: STUDYING CONTROVERSIES

January 30

Required Reading:

Martin, Brian (1988) 'Analyzing the Fluoridation Controversy: Resources and Structures', *Social Studies of Science* 18/2: 331-63.

Scott, Pam, Richards, Evelleen and Martin, Brian (1990) 'Captives of Controversy: The Myth of the Neutral Social Researcher in Contemporary Scientific Controversies', *Science, Technology & Human Values* 15/4: 474-94.

Supplementary reading:

Martin, Brian and Richards, Evelleen (1995) 'Scientific knowledge, controversy and public decision making', in Sheila Jasanoff, Gerald E. Markle, James C. Petersen and Trevor Pinch (eds), *Handbook of science and technology studies* (Thousand Oaks CA: Sage): 506-26.

Jasanoff, Sheila S. (1987) 'Contested Boundaries in Policy-Relevant Science', *Social Studies of Science* 17/2: 195-230.

Markle, Gerald E. and Petersen, James C. (1981) 'Controversies in Science and Technology - A Protocol for Comparative Research', *Science, Technology, & Human Values* 6/34: 25-30.

Lieberman, Bernhardt (1995) 'What the Controversies Over the Health Effects of Exposure to Environmental Tobacco Smoke Tell Us About the Debates Between Objectivists and Social Constructionists', *Qualitative Inquiry* 1/2: 243-72.

Martin, Brian (1996) 'Sticking a Needle into Science: The Case of Polio Vaccines and the Origin of AIDS', *Social Studies of Science* 26/2: 245-76.

Garrety, Karin (1997) 'Social Worlds, Actor-Networks and Controversy: The Case of Cholesterol, Dietary Fat and Heart Disease', *Social Studies of Science* 27/5: 727-73

WEEK 5: SCIENCE IN ACTION: ACTOR-NETWORK THEORY AND LABORATORIES

February 6

Required Reading:

Latour, Bruno (1987) 'Ch. 2. Laboratories', in, *Science in Action: how to follow scientists and engineers through society* (Cambridge MA: Harvard University Press): 63-100.

Latour, Bruno (1983) 'Give me a laboratory and I will raise the world', in K Knorr-Cetina and M. J. Mulkay (eds), *Science observed: perspectives on the social study of science* (London: Sage): 141-70.

Callon, Michel (1986) 'Some elements of a sociology of translation: domestication of the scallops and the fishermen of St. Brieuc Bay', in John Law (ed), *Power, Action and Belief: A New Sociology of Knowledge* (London: Routledge & Kegan Paul): 196-233.

Supplementary reading:

Latour, Bruno and Woolgar, Steve (1979) 'Introduction and Ch 2 An anthropologist visits the laboratory', in, *Laboratory life: the social construction of scientific facts* (Beverly Hills, CA: Sage Publications): 11-14, 43-90.

Yearley, Steven (2005) 'Chapter 4: Actor-Networks in Science', in, *Making sense of science: understanding the social study of science* (London: Sage): 55-68.

Knorr Cetina, Karin (1995) 'Laboratory Studies: The Cultural Approach to the Study of Science', in Sheila Jasanoff, Gerald E. Markle, James C. Petersen and Trevor Pinch (eds), *Handbook of Science and Technology Studies* (London: Sage): 140-66.

Knorr-Cetina, Karin (1999) 'Ch 2. What is a laboratory?', in, *Epistemic cultures: how the sciences make knowledge* (Cambridge, MA: Harvard University Press): 26-45.

Doing, Park (2008) 'Give me a laboratory and I will raise a discipline: the past, present and future politics of laboratory studies in STS', in Edward J. Hackett, Olga Amsterdamska, Michael Lynch and Judy Wajcman (eds), *The Handbook of Science and Technology Studies* (Cambridge MA: MIT Press).

WEEK 6: FEMINIST APPROACHES TO SCIENCE STUDIES

February 13

Haraway, Donna (1988) 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective', *Feminist Studies* 14/3: 575-99.

Martin, Emily (1991) 'The Egg and the Sperm: How Science Has Constructed a Romance Based on Stereotypical Male-Female Roles', *Signs* 16/3: 485-501.

Mamo, Laura (2007) 'Negotiating Conception: Lesbians' Hybrid-Technological Practices ', *Science, Technology & Human Values* 32/3: 369-93.

Supplementary reading:

Clarke, Adele and Montini, Theresa (1993) 'The Many Faces of RU486: Tales of Situated Knowledges and Technological Contestations', *Science, Technology & Human Values* 18/1: 42-78.

Haraway, Donna (1994) 'A game of cat's craddle: science studies, feminist theory, cultural studies', *Configurations* 2/1: 59-71.

Fishman, Jennifer R. (2004) 'Manufacturing Desire: The Commodification of Female Sexual Dysfunction ', *Social Studies of Science* 34/2: 187-218.

Rapp, Rayna (2001) 'Gender, Body, Biomedicine: How Some Feminist Concerns Dragged Reproduction to the Center of Social Theory', *Medical Anthropology Quarterly* 15/4: 466-77.

Harding, Sandra (1996) 'Science Is "Good to Think With"', *Social Text* /46/47: 15-26.

Yearley, Steven (2005) 'Chapter 5: Gender and Science Studies', in, *Making sense of science: understanding the social study of science* (London: Sage): 69-82.

Singleton, Vicky (1996) 'Feminism, Sociology of Scientific Knowledge and Postmodernism: Politics, Theory and Me', *Social Studies of Science* 26/2: 445-68.

READING WEEK

NO CLASS

WEEK 7: POST-COLONIAL APPROACHES TO SCIENCE STUDIES

February 27

Recommended Reading:

Watson-Verran, Helen and Turnbull, David (1995) 'Science and other indigenous knowledge systems', in Sheila Jasanoff, Gerald E. Markle, James C. Petersen and Trevor Pinch (eds), *Handbook of science and technology studies* (Thousand Oaks CA: Sage): 115-39.

Anderson, Warwick (2009) 'From subjugated knowledge to conjugated subjects: science and globalisation, or postcolonial studies of science?', *Postcolonial Studies* 12/4: 389-400.

Chambers, David Wade and Gillespie, Richard (2000) 'Locality in the History of Science: Colonial Science, Technoscience, and Indigenous Knowledge', *Osiris* 15: 221-40.

Supplementary reading:

Anderson, Warwick (2002) 'Introduction: Postcolonial Technoscience ', *Social Studies of Science* 32/5-6: 643-58.

Scott, Colin (1996) 'Science of the West, Myth for the rest? The case of James Bay Cree knowledge construction', in Laura Nader (ed), *Naked science: anthropological inquiry into boundaries, power, and knowledge* (New York: Routledge): 69-86.

Bielawski, Ellen (1996) 'Inuit indigenous knowledge and science in the Arctic', in Laura Nader (ed), *Naked science: anthropological inquiry into boundaries, power, and knowledge* (New York: Routledge): 216-27.

Adams, Vincanne (2002) 'Randomized Controlled Crime: Postcolonial Sciences in Alternative Medicine Research ', *Social Studies of Science* 32/5-6: 659-90.

Verran, Helen (2002) 'A Postcolonial Moment in Science Studies: Alternative Firing Regimes of Environmental Scientists and Aboriginal Landowners ', *Social Studies of Science* 32/5-6: 729-62.

Turnbull, David (2000) *Masons, tricksters, and cartographers: comparative studies in the sociology of scientific and indigenous knowledge* (Amsterdam: Harwood Academic).

Hess, David J. (1995) *Science and technology in a multicultural world: the cultural politics of facts and artifacts* (New York: Columbia University Press).

Harding, Sandra (2009) 'Postcolonial and feminist philosophies of science and technology: convergences and dissonances', *Postcolonial Studies* 12/4: 401 - 21.

Harding, Sandra G. (2008) *Sciences from below: feminisms, postcolonialities, and modernities* (Durham NC: Duke University Press).

Martello, Marybeth Long (2008) 'Arctic Indigenous Peoples as Representations and Representatives of Climate Change', *Social Studies of Science* 38/3: 351-76.

Martello, Marybeth Long (2001) 'A Paradox of Virtue?: "Other" Knowledges and Environment-Development Politics', *Global Environmental Politics* 1/3: 114-41.

WEEK 8: SOCIAL CONTRUCTION OF TECHNOLOGY (SCOT)

March 6

Required Reading:

Pinch, Trevor J. and Bijker, Wiebe E. (1987) 'The social construction of facts and artifacts: or how the sociology of science and the sociology of technology might benefit each ', in Wiebe E. Bijker, Thomas P. Hughes and Trevor J. Pinch (eds), *The social construction of technological systems: new directions in the sociology and history of technology* (Cambridge, MA: MIT Press): 17-50.

Kline, Ron and Pinch, Trevor (1996) 'Users as Agents of Technological Change: The Social Construction of the Automobile in the Rural United States', *Technology and Culture* 37/4: 763-95.

Siegel Watkins, Elizabeth 'The Social Construction of a Contraceptive Technology: An Investigation of the Meanings of Norplant', *Science, Technology & Human Values* 36/1: 33-54.

Supplementary reading:

Bijker, Wiebe E. (2010) 'How is technology made? That is the question!', *Cambridge Journal of Economics* 34/1 (January 1, 2010): 63-76.

Bijker, Wiebe E. (1987) 'The social construction of bakelite: toward a theory of invention', in Wiebe E. Bijker, Thomas P. Hughes and Trevor J. Pinch (eds), *The social construction of technological systems: new directions in the sociology and history of technology* (Cambridge, MA: MIT Press): 159-87.

Bijker, Wiebe E. (1992) 'The social construction of fluorescent lighting, or how an artifact was invented in its diffusion stage', in Wiebe E. Bijker and John Law (eds), *Shaping technology/building society: studies in sociotechnical change* (Cambridge, MA: MIT Press): 75-102.

Bijker, Wiebe E. (1993) 'Do Not Despair: There Is Life after Constructivism', *Science, Technology & Human Values* 18/1: 113-38.

Bijker, Wiebe E. and Pinch, Trevor (2002) 'SCOT Answers, Other Questions: A Reply to Nick Clayton', *Technology and Culture* 43/2: 361-69.

Rosen, Paul (1993) 'The Social Construction of Mountain Bikes: Technology and Postmodernity in the Cycle Industry', *Social Studies of Science* 23/3: 479-513.

Elzen, Boelie (1986) 'Two Ultracentrifuges: A Comparative Study of the Social Construction of Artefacts', *Social Studies of Science* 16/4: 621-62.

Humphreys, Lee (2005) 'Reframing Social Groups, Closure, and Stabilization in the Social Construction of Technology', *Social Epistemology: A Journal of Knowledge, Culture and Policy* 19/2: 231 - 53.

Klein, Hans K. and Kleinman, Daniel Lee (2002) 'The Social Construction of Technology: Structural Considerations', *Science, Technology, & Human Values* 27/1: 28-52.

Rodgers, Kerry E. (1996) 'Multiple Meanings of Alar after the Scare: Implications for Closure', *Science, Technology & Human Values* 21/2: 177-97.

WEEK 9: ACTOR-NETWORK THEORY AND TECHNOLOGY

March 13

Required Reading:

Law, John (1987) 'Technology and heterogeneous engineering: the case of Portuguese expansion', in Wiebe E. Bijker, Thomas P. Hughes and Trevor J. Pinch (eds), *The social construction of technological systems: new directions in the sociology and history of technology* (Cambridge, MA: MIT Press): 111-34.

Callon, Michel and Law, John (1997) 'After the Individual in Society: Lessons on Collectivity from Science, Technology and Society ', *Canadian Journal of Sociology* 22/2: 165-82.

Latour, Bruno (1992) 'Where are the Missing Masses? The Sociology of a Few Mundane Artifacts', in Wiebe E. Bijker and John Law (eds), *Shaping technology/building society: studies in sociotechnical change* (Cambridge, MA: MIT Press): 225-58.

Supplementary reading:

Akrich, Madeline (1992) 'The De-Scription of Technical Objects', in Wiebe E. Bijker and John Law (eds), *Shaping technology/building society: studies in sociotechnical change* (Cambridge, MA: MIT Press): 205-25.

Mol, Annemarie and Mesman, Jessica (1996) 'Neonatal Food and the Politics of Theory: Some Questions of Method', *Social Studies of Science* 26/2: 419-44.

Moser, Ingunn (2006) 'Disability and the promises of technology: Technology, subjectivity and embodiment within an order of the normal', *Information, Communication & Society* 9/3: 373 - 95.

WEEK 10: FEMINIST TECHNOLOGY STUDIES

March 20

Required Reading:

Faulkner, Wendy (2001) 'The technology question in feminism: A view from feminist technology studies', *Women's Studies International Forum* 24/1: 79-95.

Landström, Catharina (2007) 'Queering feminist technology studies', *Feminist Theory* 8/1 (April 1, 2007): 7-26.

Fischer, Claude S. (1988) 'Gender and the residential telephone, 1890–1940: Technologies of sociability', *Sociological Forum* 3/2: 211-33.

Supplementary reading:

Wajcman, Judy (2000) 'Reflections on Gender and Technology Studies: In What State is the Art?', *Social Studies of Science* 30/3: 447-64

Wajcman, Judy (2010) 'Feminist theories of technology', *Cambridge Journal of Economics* 34/1: 143-52.

Cowan, Ruth Schwartz (1999) 'The industrial revolution in the home', in Donald A. MacKenzie and Judy Wajcman (eds), *The social shaping of technology* (Buckingham: Open University Press): 281-300.

Faulkner, Wendy (2000) 'The Power and the Pleasure? A Research Agenda for Making Gender Stick to Engineers', *Science, Technology & Human Values* 25/1: 87-119.

Gill, Rosalind and Grint, Keith (1995) 'The gender-technology relation: contemporary theory and research', in Keith Grint and Rosalind Gill (eds), *The gender-technology relation: contemporary theory and research* (London: Taylor & Francis): 1-28.

Grint, Keith and Woolgar, Steve (1995) 'On Some Failures of Nerve in Constructivist and Feminist Analyses of Technology', *Science, Technology & Human Values* 20/3: 286-310.

Cowan, Ruth Schwartz (1987) 'The consumption junction: a proposal for research strategies in the sociology of technology', in Wiebe E. Bijker, Thomas P. Hughes and Trevor J. Pinch (eds), *The social construction of technological systems: new directions in the sociology and history of technology* (Cambridge, MA: MIT Press): 261-80.

Wajcman, Judy (1991) 'The built environment: women's place, gendered space', in, *Feminism confronts technology* (University Park, PA: Pennsylvania State University Press): 110-36.

WEEK 11: USERS AND TECHNOLOGY

March 27

Required reading:

Oudshoorn, Nelly and Pinch, Trevor (2005) 'Introduction: how users and non-users matter', in Nelly Oudshoorn and Trevor Pinch (eds), *How users matter: the co-construction of users and technologies* (Cambridge, MA: MIT Press): 1-25.

van Oost, Ellen (2005) 'Materialized gender: how shavers configure the users' femininity and masculinity', in Nelly Oudshoorn and Trevor Pinch (eds), *How users matter: the co-construction of users and technologies* (Cambridge, MA: MIT Press): 193-208.

Oudshoorn, Nelly (2005) 'Clinical trials as a cultural niche in which to configure the gender identities of users: the case of male contraceptive development', in Nelly Oudshoorn and Trevor Pinch (eds), *How users matter: the co-construction of users and technologies* (Cambridge, MA: MIT Press): 209-28.

Supplementary reading:

Woolgar, Steve (1991) 'Configuring the user: the case of usability trials', in John Law (ed), *A sociology of monsters: essays on power, technology, and domination* (London: Routledge): 57-99.

Oudshoorn, Nelly, Rommes, Els and Stienstra, Marcelle (2004) 'Configuring the User as Everybody: Gender and Design Cultures in Information and Communication Technologies', *Science, Technology & Human Values* 29/1: 30-63.

Pinch, Trevor (2005) 'Giving birth to new users: how the Minimoog was sold to Rock and Roll', in Nelly Oudshoorn and Trevor Pinch (eds), *How users matter: the co-construction of users and technologies* (Cambridge, MA: MIT Press): 247-70.

WEEK 12: SCIENCE, TECHNOLOGY AND THE BODY

April 3

Required Reading:

Malatino, H. (2017) ‘Biohacking gender: Cyborgs, coloniality, and the pharmacopornographic era’ in Journal of the Theoretical Humanities, 22(2): 179-190.

Bennett, G., N. Gilman, A. Stavrianakis and P. Rabinow (2009) ‘From synthetic biology to biohacking: Are we prepared?’ in Nature Biotechnology, 27(12): 1109-1111.

Pitts, V. (2000) ‘Visibly queer: Body technologies and sexual politics’ in The Sociological Quarterly, 41(3): 443-463.

Duarte, B. (2014) ‘Entangled agencies: New individual practices of human-technology hybridism through body hacking’ in NanoEthics, 8(3): 275-285.

Supplementary reading:

Haraway, D. (1985) 'A Manifesto for Cyborgs: Science, technology, and socialist feminism in the 1980s' in Australian Feminist Studies, 2(4): 1-42.

Academic Regulations, Accommodations, Plagiarism, Etc.

University rules regarding registration, withdrawal, appealing marks, and most anything else you might need to know can be found on the university's website, here: https://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

Academic Accommodations:

Carleton is committed to providing academic accessibility for all individuals. You may need special arrangements to meet your academic obligations during the term. The accommodation request processes, including information about the Academic Consideration Policy for Students in Medical and Other Extenuating Circumstances, are outlined on the Academic Accommodations website (students.carleton.ca/course-outline).

Academic Accommodations for Students with Disabilities:

The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at **613-520-6608 or pmc@carleton.ca** for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send your ***Letter of Accommodation*** at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (*if applicable*).

*The deadline for contacting the Paul Menton Centre regarding accommodation for February/March examinations is **February 1, 2025** and **March 15, 2025** for April examinations.

For Religious Obligations:

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: www.carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

For Pregnancy:

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details,

visit the Equity Services website: www.carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

For Survivors of Sexual Violence:

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: www.carleton.ca/sexual-violence-support

Accommodation for Student Activities:

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf

Plagiarism:

Plagiarism is the passing off of someone else's work as your own and is a serious academic offence. For the details of what constitutes plagiarism, the potential penalties and the procedures refer to the section on Instructional Offences in the Undergraduate Calendar. Students are expected to familiarize themselves with and follow the Carleton University Student Academic Integrity Policy (See https://carleton.ca/registrar/academic-integrity/). The Policy is strictly enforced and is binding on all students. Academic dishonesty in any form will not be tolerated. Students who infringe the Policy may be subject to one of several penalties.

What are the Penalties for Plagiarism?

A student found to have plagiarized an assignment may be subject to one of several penalties including but not limited to: a grade of zero, a failure or a reduced grade for the piece of academic work; reduction of final grade in the course; completion of a remediation process; resubmission of academic work; withdrawal from course(s); suspension from a program of study; a letter of reprimand.

What are the Procedures?

All allegations of plagiarism are reported to the faculty of Dean of FASS and Management. Documentation is prepared by instructors and departmental chairs. The Dean writes to the student and the University Ombudsperson about the alleged plagiarism. The Dean reviews the allegation. If it is not resolved at this level then it is referred to a tribunal appointed by the Senate.

Assistance for Students:

Mental Health: As a student you may experience a range of mental health challenges that significantly impact your academic success and overall well-being. If you need help, please speak to someone. There

are numerous resources available both on- and off-campus to support you. For more information, please consult https://wellness.carleton.ca/

Academic and Career Development Services: https://carleton.ca/career/

Writing Services: http://www.carleton.ca/csas/writing-services/

Peer Assisted Study Sessions (PASS): https://carleton.ca/csas/group-support/pass/

Important Information:

- Student or professor materials created for this course (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).
- Students must always retain a hard copy of all work that is submitted.
- Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.
- Carleton University is committed to protecting the privacy of those who study or work here (currently and formerly). To that end, Carleton's Privacy Office seeks to encourage the implementation of the privacy provisions of Ontario's *Freedom of Information and Protection of Privacy Act* (FIPPA) within the university.
- In accordance with FIPPA, please ensure all communication with staff/faculty is via your Carleton email account. To get your Carleton Email you will need to activate your MyCarletonOne account through Carleton Central. Once you have activated your MyCarletonOne account, log into the MyCarleton Portal.
- Please note that you will be able to link your MyCarletonOne account to other non-MyCarletonOne accounts and receive emails from us. However, for us to respond to your emails, we need to see your full name, CU ID, and the email must be written from your valid MyCarletonOne address. Therefore, it would be easier to respond to your inquiries if you would send all email from your connect account. If you do not have or have yet to activate this account, you may wish to do so by visiting https://students.carleton.ca/.

WINTER TERM 2025 – Important Dates and Deadlines

Date	Activity
December 30, 2024	Deadline for course outlines to be made available to students registered in full winter and early winter term courses.
January 3, 2025	University reopens.
January 6, 2025	Winter term begins. Full winter and early winter classes begin.
January 10, 2025	Last day for registration and course changes (including auditing) in early winter courses.

January 17, 2025	Last day for registration and course changes (including auditing) in full winter and late winter courses.
	Last day to withdraw from early winter courses with a full fee adjustment.
	Graduate students who have not electronically submitted their final thesis copy to the Faculty of Graduate and Postdoctoral Affairs will not be eligible to graduate in winter 2025 and must register for the winter 2025 term.
January 24-26, January 31-February 2, 2025	Full fall and late fall term deferred final examinations will be held.
January 31, 2025	Last day to withdraw from full winter courses and the winter portion of fall/winter courses with a full fee adjustment.
February 1, 2025	Last day for academic withdrawal from early winter courses.
	Last day to request Formal Examination Accommodations for Feb/Mar final examinations from the Paul Menton Centre for Students with Disabilities. Note that it may not be possible to fulfil accommodation requests received after the specified deadlines.
February 7, 2025	Last day for summative tests or examinations, or formative tests or examinations totaling more than 15% of the final grade, in early winter term undergraduate courses, before the official Feb/Mar final examination period (see examination regulations in the Academic Regulations of the University section of the Undergraduate Calendar/General Regulations of the Graduate Calendar).
February 14, 2025	Last day of early winter classes.
	Last day for final take-home examinations to be assigned in early winter courses, with the exception of those conforming to the examination regulations in the Academic Regulations of the University section of the Undergraduate Calendar/General Regulations of the Graduate Calendar.
	Last day that can be specified by an instructor as a due date for term work for early winter courses.
	April examination schedule available online.
February 17, 2025	Statutory holiday. University closed.
	Deadline for course outlines to be made available to students registered in late winter courses.

February 17-21, 2025	Winter break, no classes.
February 22-23, March 1-2, 2025	Final examinations in early winter undergraduate courses will be held.
February 24, 2025	Late winter classes begin.
March 1, 2025	Last day for receipt of applications to Bachelor of Architecture, Bachelor of Industrial Design, Bachelor of Information Technology (Interactive Multimedia and Design), Bachelor of Music and Bachelor of Social Work degree programs for the fall/winter session.
	Last day for receipt of applications for admission to an undergraduate program for the summer term.
	Last day for receipt of applications for admission from candidates who wish to be guaranteed consideration for financial assistance (including Carleton fellowships, scholarships and teaching assistantships) administered by Carleton University. Candidates whose applications are received after the March 1 deadline may be considered for the award of a fellowship, scholarship or teaching assistantship (Graduate students only).
March 7, 2025	Last day to withdraw from late winter term courses with a full fee adjustment.
March 14-16, 2025	Early winter undergraduate deferred final examinations will be held.
March 15, 2025	Last day for academic withdrawal from full winter, late winter, and fall/winter courses.
	Last day to request Formal Examination Accommodations for April full winter, late winter, and fall/winter final examinations from the Paul Menton Centre for Students with Disabilities. Note that it may not be possible to fulfil accommodation requests received after the specified deadlines.
March 25, 2025	Last day for summative tests or examinations, or formative tests or examinations totaling more than 15% of the final grade, in full winter term or fall/winter undergraduate courses, before the official April final examination period (see examination regulations in the Academic Regulations of the University section of the Undergraduate Calendar/General Regulations of the Graduate Calendar).
April 1, 2025	Last day for graduate students to submit their supervisor-approved thesis, in examinable form to the department.
	Last day for receipt of applications for admission to an undergraduate degree program for the fall/winter session from applicants whose

	documents originate from outside Canada or the United States, except for applications due March 1.
	Last day for receipt of applications from potential spring (June) graduates.
	Last day for summative tests or examinations, or formative tests or examinations totaling more than 15% of the final grade, in late winter term undergraduate courses, before the official final examination period (see examination regulations in the Academic Regulations of the University section of the Undergraduate Calendar/General Regulations of the Graduate Calendar).
April 8, 2025	Winter term ends.
	Last day of full winter, late winter, and fall/winter classes.
	Last day for final take-home examinations to be assigned, with the exception of those conforming to the examination regulations in the Academic Regulations of the University section of the Undergraduate Calendar/General Regulations of the Graduate Calendar.
	Last day that can be specified by an instructor as a due date for term work for full winter and late winter courses.
April 9-10, 2025	No classes or examinations take place.
April 11-26, 2025	Final examinations in full winter, late winter, and fall/winter courses will be held. Examinations are normally held all seven days of the week.