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| Course Title: Design, Digital Technology and the Built Environment (Web-Based section) | | | |
| Course Number | ARCH 402 | | |
| Pre/Co-Requisites | None | | |
| Instructor Name | T.P. Keenan, BA, MSc., MA, Ed.D. | Instructor Email: | keenan@ucalgary.ca |
| Office Location | PFB 4184 | Office hours: | Via Zoom on request |
| TA Name | Dania Shahab, BA, M.Arch (candidate) | TA Email: | dania.shahab@ucalgary.ca |
| Class Dates | Winter 2022 | | |
| Class Times | Mondays, 1100-1345 | | |
| Class Location | Mandatory weekly lecture/discussion via Zoom plus asynchronous individual and group work | | |

Course Information / Description of the Course

An introduction to the fundamental principles underlying modern digital technology-based systems, from a design of the built environment perspective. Topics include The Attention Economy, Big Data, Surveillance Capitalism, Ambient Intelligence, the Internet of Things, Opaque and Transparent Algorithms, Biocreepiness, and Systems Thinking. No specific technical background is required. Participants will complete a design project on a topic of personal interest.

Learning Resources

Required readings, textbooks, and learning materials:
Technocreep: The Surrender of Privacy and the Capitalization of Intimacy, by Thomas P. Keenan, 2014, Greystone Books (Vancouver) and OR Books (NYC). Available at the University of Calgary bookstore and online at Amazon.ca.

https://www.amazon.ca/Technocreep-Surrender-Privacy-Capitalization-Intimacy/dp/1771641223/ref=tmm_pap_swatch_0

Either the paperback, audiobook, or e-book edition can be used.

All other required readings will be provided on D2L, though students are encouraged to consult additional resources and to cite them. The use of references, where appropriate, is encouraged in this course, and will be considered in grading.

Access to the Internet, D2L, and a device capable of playing videos are required.

Course Learning Outcomes

1. To achieve an evidence-based, holistic understanding of the issues relevant to digital-technology based systems in the built environment.
2. To develop excellent writing and presentation skills.
3. To understand how an interdisciplinary approach can be used to solve complex problems.
4. To apply “design thinking” to help form a personal vision of what life will be like in the future with respect to creepiness.
5. To become familiar with the various career paths and educational options relevant to the topics covered in the course.

Assessment Components

| Assessment Method | Description | Weight | Aligned Course Learning Outcome |
|---|-------------------------|--------|---------------------------------|
| “My Creepy Future World” major presentation | Via Zoom: as scheduled | 20% | All |
| “My Creepy Future World” research paper with references (APA format) -- 10-15 pages double spaced | Due 2359 April 12, 2022 | 30% | All |

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| <p>Class participation</p> <p>Hard copy of presentation to be submitted to dropbox by 2359 on day of in-class presentation.</p> <p>If a group presentation, only one member needs to submit but please ensure that all group member names and UCID numbers are in the Dropbox comment field.</p> | <p>In class presentations, (four highest marks for 10% each) + class discussions + participation in online discussion boards (10%)</p> | <p>50%</p> | <p>All</p> |
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Assessment and Evaluation Information

Attendance and Participation Expectations: Students are expected to attend the weekly mandatory Zoom session, read all the materials posted, participate actively in both class and online discussions, and complete assignments on a timely basis.

Guidelines for Submitting Assignments: To be submitted electronically via D2L in the appropriate dropbox.

Final Examination: None

Expectations for Writing (<https://www.ucalgary.ca/pubs/calendar/current/e-2.html>):

Late Assignments: Will be accepted until the “Final Deadline” (see schedule) with a possible deduction for lateness.

Criteria that must be met to pass: (e.g. whether or not a passing grade on any particular component of a course is essential if the student is to pass the course as a whole)

It is not necessary to pass any specific component to pass the course.

The final grade in this course will be based on assignments and participation in live and online class discussions.

Late assignments will be accepted up until the Final Deadline but may be penalized up to one full grade (e.g. A to B). Assignments not submitted by the final deadline will receive a grade of F.

Class participation will be evaluated based on the quality and quantity of live and online D2L discussions, which should build upon the topics presented in that week. Posting of relevant resources that may be helpful to the other students in the class is particularly encouraged. To obtain full marks in the participation component, students should make at least one timely, thoughtful, relevant, interesting, and non-trivial posting each week.

Writing quality (clarity, spelling, grammar, etc.) will form part of the basis for assignment and discussion evaluation.

In general, lectures and presentations via Zoom will be recorded and made available. However, *you are still expected to attend and to participate in the mandatory weekly Zoom class.* If you must miss any of this material, you should review the relevant recordings and also contact the instructor.

Grading Scale. PLEASE NOTE: This is the current official grading scale and interpretation of grades of the School of Architecture, Planning, and Landscape. It may differ from the grading scale of the faculty in which you are registered.

In particular, it is significantly different from the Undergraduate Grading System chart in the University of Calgary Calendar <http://www.ucalgary.ca/pubs/calendar/current/f-1-1.html> This is because (as noted in the Calendar) "University policy requires that students' grades in a course are reported according to the grading scheme of the faculty or school giving the course (regardless of the faculty or school in which a student is registered) and are so recorded on students' transcripts of record."

| Grade | Grade Point Value | 4-Point Range | Percent | Description |
|-------|-------------------|---------------|----------|---|
| A+ | 4.00 | 4.00 | 95-100 | Outstanding - evaluated by instructor |
| A | 4.00 | 3.85-4.00 | 90-94.99 | Excellent - superior performance showing comprehensive understanding of the subject matter |
| A- | 3.70 | 3.50-3.84 | 85-89.99 | Very good performance |
| B+ | 3.30 | 3.15-3.49 | 80-84.99 | Good performance |
| B | 3.00 | 2.85-3.14 | 75-79.99 | Satisfactory performance |
| B- | 2.70 | 2.50-2.84 | 70-74.99 | Minimum pass for students in the Faculty of Graduate Studies |
| C+ | 2.30 | 2.15-2.49 | 65-69.99 | All final grades below B- are indicative of failure at the graduate level and cannot be counted toward Faculty of Graduate Studies course requirements. |
| C | 2.00 | 1.85-2.14 | 60-64.99 | |
| C- | 1.70 | 1.50-1.84 | 55-59.99 | |
| D+ | 1.30 | 1.15-1.49 | 50-54.99 | |
| D | 1.00 | 0.50-1.14 | 45-49.99 | |
| F | 0.00 | 0-0.49 | 0-44.99 | |

For students registered in the Faculty of Graduate Studies ONLY: A student who receives a "C+" or lower in any one course will be required to withdraw regardless of their grade point average (GPA) unless the program recommends otherwise. If the program permits the student to retake a failed course, the second grade will replace the initial grade in the calculation of the GPA, and both grades will appear on the transcript.

| Topic Areas & Detailed Class Schedule | | |
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| Course Schedule Date | Topic (subject to change) | Assignments/Due Dates |
| Jan 10, 2022 Topic 1 | Intro to Course and definition of Technocrep and other key terms including "Design Thinking", "Creep Theory" "Attention Economy" and "Surveillance Capitalism" | Mini-presentations (highest four will be counted as part of class participation) Details provided in class |
| Jan 17, 2022 Topic 2 | Camera/Surveillance Creep | Mini-presentations |
| Jan 24, 2022 Topic 3 | Deception Creep, Lies, Manipulation, Image Fakery | Mini-presentations |
| Jan 31, 2022 Topic 4 | Sensor and IoT Creep | Mini-presentations |
| Feb 7, 2022 Topic 5 | Robot and Physible Creep | Mini-presentations |
| Feb 14, 2022 Topic 6 | Biocrep | Mini-presentations |
| Feb 20-26, 2022 | Term Break No classes | |
| Feb 28, 2022 Topic 7 | Surveillance Capitalism | Mini-presentations |
| Mar. 7, 2022 Topic 8 | Algorithm and Artificial Intelligence Creep | Mini-presentations |
| Mar 14, 2022 Topic 9 | Child and Pet Creep | Mini-presentations |
| Mar 21, 2022 Topic 10 | Government Creep/Big Data | Mini-presentations |
| Mar 28, 2022 Topic 11 | Future Creep, Anti-Creep | |
| Apr 4, 2022 | Major presentations via Zoom as scheduled | Everyone's major presentation slides (amended to incorporate comments received) and written papers are due in dropbox @2359, April 12, 2022 |
| Apr 11, 2022 | Major presentations via Zoom as scheduled | Everyone's major presentation slides (amended to incorporate comments received and written papers are due in dropbox @2359, April 12, 2022 |
| Apr. 12, 2022 @2359 | Final deadline | Last opportunity to submit assignments and post in discussion boards. |

Special Budgetary Requirements

None.

University of Calgary Policies and Supports

ACADEMIC ACCOMMODATION

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policy on Student Accommodations is available at <http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf>.

ACADEMIC MISCONDUCT

Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Most commonly plagiarism exists when: (a) the work submitted or presented was done, in whole or in part, by an individual other than the one submitting or presenting the work, (b) parts of the work are taken from another source without reference to the original author, (c) the whole work (e.g., an essay) is copied from another source, and/or, (d) a student submits or presents work in one course which has also been submitted in another course (although it may be completely original with that student) without the knowledge of or prior agreement of the instructor involved. While it is recognized that scholarly work often involves reference to the ideas, data and conclusions of other scholars, intellectual honesty requires that such references be explicitly and clearly noted. Plagiarism is an extremely serious academic offence. Any suspicion of plagiarism will be reported to the Dean, and dealt with as per the regulations in the University of Calgary Graduate Calendar.

For information on academic misconduct and its consequences, please see the University of Calgary Calendar at <http://www.ucalgary.ca/pubs/calendar/current/k.html>

COPYRIGHT LEGISLATION:

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf) and requirements of the copyright act (<https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html>) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments will be accessible only by the authorized course faculty.

Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary.

UNIVERSITY STUDENT APPEALS OFFICE: If a student has a concern about a grade that they have received, they should refer to Section I of the Undergraduate Calendar (<https://www.ucalgary.ca/pubs/calendar/current/i-3.html>) which describes how to have a grade reappraised. In addition, the student should refer to the SAPL's Procedure for reappraisal of grades

More student support and resources (e.g. safety and wellness) can be found here:
<https://www.ucalgary.ca/registrar/registration/course-outlines>