Course Description
This graduate seminar takes up questions of power and knowledge. Data-based decision making, empirical research and data-driven accountability systems are increasingly becoming the norm the world over. This seminar will apply a critical and decolonizing lens to these developments with the goal of better understanding what consequences and implications quantification, "datafication", algorithms, and analytics techniques sometimes referred to as "big data" have for schools, teachers, students and families. This is not a research methodology course. While students will gain familiarity with metrics and the construction of algorithms, the focus of the course will be on socio-cultural analysis of these increasingly important contemporary practices. One premise of the course, warranting it being taught as a comparative education course, is that politics around data and calculation are not just restricted to national landscapes but are increasingly shaped through transnational networks and global interactions. The seminar will include a historical perspective on the rise of data in education and is suitable for graduate students from across the School of Education.

Course Objectives
Students will examine a special topic area within the significance for the field of comparative and international education and will develop advanced knowledge through extensive exploration of current scholarship and original research.

This course also aims to advance the mission of the Cultural and Educational Policy Studies (CEPS) program at Loyola University Chicago which seeks to provide a multi-disciplinary examination of education policy and practice with an overarching emphasis on social justice. Toward this end, this particular course advances the preparation of our students to meet the following program outcomes:

- CEPS graduates apply disciplinary (humanities, social science) perspectives to issues and questions in educational policy and practice.
- CEPS graduates critically assess the methodological, epistemological & ethical foundations of research.
- CEPS graduates possess an independent and specific area of expertise.

These outcomes and objectives are infused across this course with the intent of enacting and advancing the vision that The School of Education of Loyola University Chicago is a community that transforms its members to impact urban and global communities through the principles of social justice. This is also encapsulated in the SOE Conceptual Framework “Our mission is social justice, but our responsibility is social action through education,” which is similarly an orienting perspective in the design of this course. From this Conceptual Framework SOE faculty have developed four conceptual framework standards (CFS), one of which “CFS1: Candidates critically evaluate current bodies of knowledge” is assessed in this course through the original research paper assignment. The CFS assessment rubrics can be found in LiveText.
The Loyola SOE expects its students to exhibit a commitment to professionalism, social justice and inquiry. In this course students will be assessed on the degree to which they meet these dispositional expectations, rubrics for which can be found in LiveText. Disposition data is reviewed by program faculty on a regular basis. This allows faculty to work with students to develop throughout their program and address any issues as they arise.

At the end of the semester you will receive a request to evaluate the professor’s teaching using the online IDEA Campus Labs system. Please promptly respond to any emails you receive indicating that the evaluation is available. To learn more about IDEA or to access the website directly to complete your course evaluation go to: [http://luc.edu/idea/](http://luc.edu/idea/) and click on “Student IDEA Login” on the left hand side.

**Reading List**
The following 7 required books are available at the Loyola University Bookstore (Water Tower Campus).

- Sally E. Merry, *Seductions of Quantification* (University of Chicago Press, 2016)
- Sverker Lindblad, Daniel Pettersson and Thomas Popkewitz, *Education by the Numbers and the Making of Society* (Routledge, 2018)
- Ben Williamson, *Big Data in Education* (Sage, 2017)
- Martin Lawn (Editor), *The Rise of Data in Education Systems: Collection, Visualization and Use* (Symposium, 2013)

In addition, students in the course will be doing individual presentation and teaching projects connected with books on big data and algorithmic governance. We will do a sign-up / register preferences on the first day of class and the professor will assign you to one of the following:

- Virginia Eubanks, *Automating Inequality: How High-Tech Tools Profile, Police and Punish the Poor* (St. Martin’s Press, 2018) April 1st
- Jonathan S. Gagliardi, Amelia Parnell and Julia Carpenter-Hubin (Editors) *The Analytics Revolution in Higher Education: Big Data, Organizational Learning and Student Success* (Stylus, 2018) April 8th
Additional required readings will be posted on Sakai. There are also a number of readings that are available through the Loyola library website (e-journals and eBooks).

**Course Requirements**

Attendance is required for all face-to-face class meetings; if you have to miss a class, you are required to write a reaction paper discussing one of the readings for that week – also please email me in advance, whenever possible, if you will be missing a class. The make-up assignment will afford you the chance to have some interaction with the professor regarding the topics and discussions covered in class. These 3-5 page (750-1250 word) papers should be submitted to the professor in person, as printed-out papers, within two weeks of the missed class. Please do NOT submit make-up papers via email or through Sakai. Failure to write make-up reaction papers for any class absences will result in your grade being lowered one letter grade. Missing two (2) or more classes over the course of the semester will significantly hinder your learning and – unless arrangements are made with the professor – will result in your grade being lowered.

This course will use Sakai as the course management platform ([http://sakai.luc.edu](http://sakai.luc.edu)) and you must have working access to your Loyola email account in order to use Sakai and to access Loyola library resources ([http://libraries.luc.edu](http://libraries.luc.edu)). Either use your luc.edu address or set it to forward to another email account that you check regularly since the luc.edu email is the one I will use to communicate with you. This course also requires use of the LUC libraries' on-line resources and Sakai tools as part of integrating technology into teaching and learning. This semester we will also be using Apple TV to enable wireless projection from portable devices in our classroom.

Electronic devices such as laptops and iPads may only be used in class if they do not disrupt the learning environment and only if you are using it for taking notes, referencing course materials, searching online for material related to course discussions, or, to a limited extent, browsing online to follow a train of thought stimulated by course material or discussion. Using electronic resources to engage in activities such as texting, emailing, using internet sites like Facebook or Twitter, playing games, or browsing the web for content not related to the course is not permitted and will result in your being barred from using your device in class in the future. Generally speaking I prefer that cellphones remain off during class, however if you have a family or professional situation that necessitates your being reachable please let me know at the start of class.

Some form of notetaking as you read is recommended so that you can easily raise questions about the text, objections and the like during our class discussions. You should read intelligently and critically: hold authors to the claims that they make about what they intend to accomplish; hold them accountable for faulty logic and unexamined assumptions; consider alternate explanations and views to the ones presented. Since class discussions will frequently refer to the text of these books and articles, you are required to bring copies of the readings to class. You will be graded on your participation in class discussions.

You are required to bring assigned readings to class the day that we are discussing them. When assigned texts / readings are available electronically I recommend that you bring a printed-out paper copy for ease of reference. However, if you prefer to use the electronic version please make sure to have it loaded to your device (laptop, iPad or similar) at the start of class. I do not permit students to access course readings via smartphone.

**Course Assignments**

Over the course of the semester students will be required to write a final research paper and undertake an
individual book presentation project. Additional information about these assignments will be distributed in class. Active class participation is an additional required component of the class. On the two occasions when we have online activities in lieu of an in-person class meeting you will have a discussion board or blog post task that will be factored into your final participation grade.

Evaluation & Grading
The individual book presentation will compose 15% of your course grade. The final research paper will compose 50% of your grade in the course, and your class participation grade will make up the remaining 35% of your final course grade. This grade will be reflective of your engagement in class discussions and the insights and questions on assigned readings that you contribute towards your own and the entire class' enlightenment. A rubric for assessing class participation is posted on Sakai. The professor reserves the right to add specific additional assignments (such as short reaction papers or the preparation of discussion questions) that will be factored into your participation grade. Except in very unusual circumstances, relating to family issues, health problems and the like, grades of "Incomplete" will not be given in this course.

Academic Honesty
Academic honesty is an expression of interpersonal justice, responsibility and care, applicable to Loyola University faculty, students, and staff, which demands that the pursuit of knowledge in the university community be carried out with sincerity and integrity. A student's failure to practice academic honesty, depending upon the seriousness of the misconduct, will result in a sanction ranging from the grade of F for the assignment to expulsion from the university. For specific policies and procedures see: http://www.luc.edu/education/academics_policies_integrity.shtml. For additional academic policies and procedures refer to: http://www.luc.edu/education/resources/academic-policies/. Plagiarism – presenting someone else's writing or ideas as your own – is one form of academic dishonesty and will not be tolerated. There are several good "How not to plagiarize" guides available on the web, such as http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize. In class we will discuss how to cite and include others' work in your own writing as well as the citation / reference formats that I will be asking you to use.

Additional Statements
Additional information on the School of Education’s and University’s policies with regard to accessibility, conceptual framework, ethicsline reporting, and electronic communication policies and guidelines can be found here: http://luc.edu/education/syllabus-addendum/

<table>
<thead>
<tr>
<th>Course Schedule and Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday January 14</td>
</tr>
<tr>
<td>NO IN-PERSON CLASS MEETING; SEE SAKAI FOR ONLINE ACTIVITIES &amp; ASSIGNMENT</td>
</tr>
<tr>
<td>Required Reading (by 1/21):</td>
</tr>
<tr>
<td>• Lindblad, Pettersson and Popkewitz, Education by the Numbers, chapters 1, 2 &amp; 5</td>
</tr>
<tr>
<td>Monday January 21</td>
</tr>
<tr>
<td>Monday January 28</td>
</tr>
<tr>
<td>• Gilles Deleuze, “Postscript on Societies of Control” October 59 (1992): 3-7.</td>
</tr>
<tr>
<td>• Martin Lawn (Editor), The Rise of Data in Education Systems: Collection, Visualization and Use (Symposium, 2013), entire book</td>
</tr>
</tbody>
</table>
### Monday February 4
**Measuring, Categorizing, Indicating**  
- Sally E. Merry, *Seductions of Quantification* (University of Chicago Press, 2016), entire book  

### Monday February 11
**Commensuration and Comparison**  

### Monday February 18
**The Power of Metrics**  

### Monday February 25
**Assessment and Metrics in Education**  
- Lindblad, Pettersson and Popkewitz, *Education by the Numbers*, chapters 6-14.

### Monday March 4
**No Class LUC Spring Break**

### Monday March 11
**Introducing Computation: Algorithms and Machine Learning**  
- Samira ElAtia and Donald Ipperciel (Editors), *Data-mining and learning analytics: applications in educational research* (John Wiley & Sones, 2016) [LUC eBook](http://www.nyudri.org/research-index/2016/developmentbynumbers), chapter sign-up in advance

### Tuesday March 12
**SOE Wozniak Lecture — Dr. Cris Mayo**

### Monday March 18
**Computation, Algorithms and Machine Learning**  
Student-led presentations and discussion on:  
- Taina Bucher, *If... Then: Algorithmic Power & Politics* (Oxford Univ Press, 2018)

### Monday March 25
**Big Data in Education**  

### Monday April 1
**Data-Driven Inequality**  
Student-led presentations and discussion on:  
- Virginia Eubanks, *Automating Inequality: How High-Tech Tools Profile, Police and Punish the Poor* (St. Martin’s Press, 2018)  
- Safiya Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce*
Monday April 8  
**Big Data Analytics – Case Studies from Higher Education Administration**  
Student-led presentations and discussion on:  
→ Jonathan S. Gagliardi, Amelia Parnell and Julia Carpenter-Hubin (Editors) *The Analytics Revolution in Higher Education: Big Data, Organizational Learning and Student Success* (Stylus, 2018)  

Monday April 15  
**Decolonizing Data and Algorithmic Governance**  
NO IN-PERSON CLASS MEETING; SEE SAKAI FOR ONLINE ACTIVITIES & ASSIGNMENT  

Monday April 22  
**Thinking beyond the Machine/ Data / Learning Future**  
IDEA Course Evaluation Link for Students
Each course you take in the School of Education is evaluated through the IDEA Campus Labs system. We ask that when you receive an email alerting you that the evaluation is available that you promptly complete it. To learn more about IDEA or to access the website directly to complete your course evaluation go to: http://luc.edu/idea/ and click on STUDENT IDEA LOGIN on the left hand side of the page.

Dispositions
All students are assessed on one or more dispositional areas of growth across our programs: **Professionalism, Inquiry, and Social Justice**. The instructor in your course will identify the dispositions assessed in this course and you can find the rubrics related to these dispositions in LiveText. For those students in non-degree programs, the rubric for dispositions may be available through Sakai, TaskStream or another platform. Disposition data is reviewed by program faculty on a regular basis. This allows faculty to work with students to develop throughout their program and address any issues as they arise.

LiveText
All students, except those who are non-degree, must have access to LiveText to complete the benchmark assessments aligned to the Conceptual Framework Standards and all other accreditation, school-wide and/or program-wide related assessments. You can access more information on LiveText here: LiveText.

Syllabus Addendum Link

- [www.luc.edu/education/syllabus-addendum/](http://www.luc.edu/education/syllabus-addendum/)

This link directs students to statements on essential policies regarding academic honesty, accessibility, ethics line reporting and electronic communication policies and guidelines. We ask that you read each policy carefully.

This link will also bring you to the full text of our conceptual framework that guides the work of the School of Education – **Social Action through Education**.