Critical thinking in an age of fake news and false accounting

IEEL002 5 credit module (equivalent to 2.5 ECTS)

1. Module Leader

Dr Philip Leeke

Biography. I have worked all over the world as a lecturer/Instructor. In the Middle East I worked at Zayed University Abu Dhabi/Dubai where I helped to establish many of the early programmes in English language when it was a start-up institution. I have also worked at the universities of Manchester, Newcastle, Birmingham and Stirling. At Stirling I was the Director of Language programmes. My main interests include narratology, critical thinking, EAP, and the American writer Philip Roth. At Liverpool I work mainly with postgraduate students and on the ISS. In my spare time I study the noble art of Brazilian Jiu Jitsu and like to hike. I also like to cook. I own sheep, chickens and a cat. I have a partner too.

2. Module Description

Critical thinking is vital in age of bad science, counter knowledge and the spread of fake news. It is also a much valued skill for future employment. This module is students who would like to learn more about the process of thinking and how we can distinguish the plausible (could be true) from the implausible (probably not true) and the ridiculous. How and why does fake news spread? What is counter knowledge? How can we tell a good theory from a bad? Why are conspiracy theories so attractive? What is “bullshit”? Why is there so much of it? The knowledge and skills developed through this module will be valued around the globe, and are also transferrable to many disciplines

Module Aims

This module aims to:

- Build students’ confidence in understanding, discussing and communicating complex ideas, both in written and spoken language.
- Develop skills in research, collaborative learning and in preparing and delivering a group presentation.
- Introduce students to the concept of critical thinking and some of the main reasons why we are so poor at thinking and often make poor decisions. Students will be reflect on the process of thinking as well as think about some of the most important issues facing the world today.

3. Content

The following topics will be considered on the module:

- Fake news
- Frankfurt’s concept of bullshit.
- Counter knowledge and Conspiracy theory
- Political discourse analysis
- The Pinker Gray debate
- Ethos pathos logos
- Narrative and argument.
4. **Module structure**

The module will be delivered over a three-week period in six two-hour sessions (four hours per week, total 12 hours contact time). The final block will be an assessment session.

Each session will take the form of an interactive seminar, mini lecture or workshop. The students will demonstrate a knowledge of the complexity involved in thinking critically and an awareness of the increasingly difficulty in finding reliable sources of information in an Information Obese environment. Students will have ample opportunities to demonstrate an increased mastery of critical thinking skills through the many tasks completed throughout the course.

In addition, it is expected that students will spend 38 study hours outside of the classroom contact hours on activities including assigned reading, optional reading of areas of personal interest, homework tasks, web research and preparation for assessment. The ‘flipped classroom’ approach will be used, requiring students to prepare in advance for the sessions, and so students should be aware that in order to fully benefit from the face-to-face classroom sessions, they will need to have done the preparation work assigned beforehand.

5. **Teaching methods**

The teaching approach will include the following:
- Taught sessions
- Flipped classroom – preparation work
- Small group working
- Group discussions
- Presentations
- Online learning
- Workshops

6. **Assessment:**

Assessment will be by:
- Group presentation (worth 25% of the overall mark)
- Written essay/reflection of 750-850 words (worth 75% of the overall mark)

Standard University policies apply with regard to late submission of assessments. There is no re-assessment opportunity.

7. **Course structure:**

The course will be both theoretical and practical in nature, with the sessions focused on giving the students as much hands on experience as possible, and encouraging them to apply their ideas throughout.

The Indicative schedule is as follows:

**Session One:**
*Introduction to the Module and Introduction to Critical Thinking*
The course will begin with some general information about the module, including the aims and assessment. Then it moves on to consider the importance of critical
thinking historically. Socrates famously said ‘the unexamined life is not worth living’ – but was he right? What might happen if we don’t think?

Session Two:
*Bias and representation: why we are not Bayesian updaters.*
This session asks why thinking is difficult and looks at the many factors that stop us from thinking effectively. Students will be introduced to the language of critical thinking including confirmation bias, false equivalence, fallacious comparison, non sequitur and claim and counterclaim. We will also look at Aristotle’s Ethos, Pathos, Logos and how it can be used in persuasive and sometimes manipulative communication. Students will have the opportunity to practise analysing claims and counterclaims and saying why they find them plausible or not.

Session Three:
*Fake news, conspiracy theory, counter knowledge and bullshit.*
Some people think that ‘Everything is connected’ but is it? This session examines the growth of such concepts and how we can guard against them. Why is it important to be able to falsify a theory in the sense demanded by Karl Popper? Students will critically examine different websites and think about how they can be evaluated.

Session Four:
*Political discourse and its discontents: the abuse of rhetoric.*
Many politicians use phrases like ‘It’s a fact that...’ However, are they always truthful? How do people use rhetoric to persuade people? In this session students will examine a politician’s speech and the techniques it uses to persuade people of its validity. Insights and concepts from critical discourse analysis will be examined.

Session Five:
*It’s going to get worse. Isn’t it?*
In critical thinking arguments are important, but they are usually part of larger narratives. One such narrative is the idea of progress. The philosopher John Grey does not believe that humanity has made significant ethical progress. The psychologist Steven Pinker believes that we have. Pinker thinks we are becoming less violent. This is important for conflict management past and present. Where do students stand on this vital issue? In this session students will practise analysing two radically incommensurable points of view. Can there ever be a middle ground?

Session Six:
*Group Presentation of Critical thinking task.*
In this final session the students will give a short presentation on ‘thinking about my thinking.’ Has their thinking changed since doing the course? If so, how and why?

8. Learning outcomes

On completion of this module, students will be able to:

<table>
<thead>
<tr>
<th>Learning outcome</th>
<th>Assessment component which assesses this learning outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better understand and communicate complex ideas in written and spoken language</td>
<td>Written essay/reflection</td>
</tr>
<tr>
<td></td>
<td>Group presentation</td>
</tr>
</tbody>
</table>
Research a topic and work collaboratively to produce a written essay/reflection and a group presentation | Written essay/reflection 
Group presentation

Demonstrate a much greater awareness of the importance of critical thinking and the difficulty of finding reliable sources of information. | Written essay/reflection 
Group presentation

9. Skills

Key skills that will be developed:

<table>
<thead>
<tr>
<th>Skill</th>
<th>How this skill is developed</th>
<th>Mode of assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>Group discussions, activities and tasks in class</td>
<td>Group presentation</td>
</tr>
<tr>
<td>Communication</td>
<td>Orally in group discussions, activities and tasks in class, in writing by production of assessed assignment</td>
<td>Group presentation. Tasks in class.</td>
</tr>
<tr>
<td>Critical thinking</td>
<td>Thinking tasks in class</td>
<td>Essay/ Group presentation</td>
</tr>
</tbody>
</table>

10. Books, ebooks and websites:

The University Website at [www.liv.ac.uk/library](http://www.liv.ac.uk/library) provides access to many relevant books and electronic books, as well as academic journals and databases.

**Recommended Pre-Course Reading**

These texts come from the academic policy blog [The Conversation](https://theconversation.com/us) and from [The Post truth Initiative](https://posttruthinitiative.org/) at the University of Sydney.

**The Conversation**

**India has been a post-truth society for years (and maybe the West has too)**
Ranjit Gosswami.

**Post-Truth politics and the US election: why the narrative trumps the facts**
Peter Ellerton

**How conspiracy theories feed political fragmentation.** Turkay Nefes

**Fake news: if you care about being lied to you’ll be more careful about the way you use social media.** Paul Bernal

**It was Big Tobacco, not Trump, that wrote the post-truth rule book.** Andrew Rowell and Karen Evans Reeves

**Navigating the post-truth debate: some key co-ordinates.** Nick Enfield

**The ironclad logic of conspiracy theories and how to break it.** Peter Ellerton.
The world has never been as safe and peaceful as it is now. John Armstrong. (This is a review of the Steven Pinker assertion that we are becoming less violent) A rebuttal to this can be found at the Guardian website entitled: Steven Pinker is wrong about violence and War https://www.theguardian.com/books/2015/mar/13/john-gray-steven-pinker-wrong-violence-war-declining

The following texts come from some recent posts at the Post truth Initiative. They are indicative of what you might like to read. However, please feel free to explore.

October 20 | The Challenge That’s Bigger Than Fake News
October 19 | 18 pessimistic opinions on the next 10 years of fake news (and 5 optimistic ones)
October 16 | Want to be a better online sleuth? Learn to read webpages like a fact-checker
October 12 | Trump’s War on Knowledge
October 06 | The scientist who spots fake videos
October 04 | Stop Expecting Facebook and Google to Curb Misinformation — It’s Great for Business
October 02 | Notes on a new beginning by Mark Little and Áine Kerr
September 26 | Eleanor Mills: Women are still portrayed through the lens of an old, male, pale, stale establishment
September 26 | Demons and aliens, one-third of Australians expect a visit
September 18 | Reliance on ‘gut feelings’ linked to belief in fake news
September 15 | Project to “fact check” genetic studies leads to three more retractions. And it’s just getting started
September 14 | Post-truth Politics, Bullshit and Bad Ideas: ‘Deficit Fetishism’ in the UK
September 07 | Don’t give up on the fact-resistant: Tips to break the grip of misinformation
September 04 | ‘Tawdry’ politicians want to damage universities, says Oxford v-c
September 01 | How I came to know that I am a closet climate denier
September 01 | A pre-history of post-truth, East and West
August 30 | Why We Need the Liberal Arts Now More Than Ever
August 29 | Researchers taught AI to write totally believable fake reviews, and the implications are terrifying

Core Texts


All of this is relevant but students may dip in as they please.


The classic statement.


Hofstadter’s seminal essay is online.

**Chapter Twelve is the one to read: The Fine Art of Baloney Detection.**


**This is available online. Chapter ten provides a useful list of verification tools that can be printed out.**

**Useful Websites**

http://callingbullshit.org/

https://posttruthinitiative.org/

https://theconversation.com/uk

https://firstdraftnews.com/fake-news-complicated/ (This is a particularly good piece on different types of fake news and how they can be characterised.)