Правительство Российской Федерации

Федеральное государственное автономное образовательное учреждение высшего профессионального образования
"Национальный исследовательский университет
"Высшая школа экономики"

Факультет гуманитарных наук, школа филологии, направление 45.04.01 «Филология»

Рабочая программа дисциплины
«Science and English Literature»

для образовательной программы «Русская литература и компаративистика» направления 45.04.01 «Филология», уровень «магистр»

Автор программы:
Mark Taylor, PHD, доцент школы филологии taylor.mark@rocketmail.com

Одобрена на заседании школы филологии « » ____________ 2018 г.
Руководитель школы Е.Н. Пенская ________ [подпись]

Рекомендована Академическим советом образовательной программы «....» _____________ 2018 г., Протокол № _______

Утверждена «...» ____________ 2018 г.
Академический руководитель образовательной программы
Е. Е. Земскова___________ [подпись]

Москва, 2018

Настоящая программа не может быть использована другими подразделениями университета и другими вузами без разрешения кафедры-разработчика программы.
Syllabus

1. Course Description
   a. Title of the Course: Science and English Literature
   b. Pre-requisites: Minimum B2 Level English
   c. Course Type: Elective
   d. Abstract: This course explores relationships between literature and scientific thought from the nineteenth century onwards. Connections between the two fields are multiple and nuanced: writers of literature aiming for new models for representing the world have routinely engaged with scientific theories, while scientists have also leaned upon metaphor and other literary rhetoric in explaining their ideas. The course will examine a range of texts spanning literary genres which illustrate these connections.

2. Learning Objectives

   The objectives of this module are:

   - To present texts exemplar of the interaction between literature and science
   - To outline key approaches to analysing the engagement of literary texts with scientific theory
   - To develop an appreciation of the two-way relationship between the fields of literature and science

3. Learning Outcomes

   By the end of the course, students will:

   - Recognize major points of intersection between scientific theory and works of literature across a range of genres
   - Be able to employ scientific theory as a tool for analysing literature
   - Recognize the role of narrative form in moulding scientific thought and discourse
4. Course Plan

**Week 1/2: Science and Human Nature**

Primary Text: Mary Shelley, *Frankenstein* (1818)

These weeks will introduce the field of Literature and Science by looking at a seminal example of literature engaged with science – Mary Shelley’s *Frankenstein*. Drawing upon the then current ideas of Galvanism (using electricity to stimulate life), *Frankenstein* interrogates the ways in which science estranges humanity from nature, and the very question of what it means to be human.

Recommended Secondary Reading:


**Week 3/4: Literary Form and Scientific Texts**


Not only does scientific thought affect literature – literary form also affects scientific thought. In these weeks, we will reflect upon the reciprocity of this relationship, considering as an example how the argument of Darwin’s *Origin of Species* is intertwined with its narrative techniques.
Recommended Secondary Reading:


Week 5/6: Forensic Science and Detective Fiction


These weeks will focus upon detective fiction. The genre is heavily invested in scientifically-derived techniques (fingerprinting, the autopsy, DNA sampling, and so on). The purpose of these is typically to establish an identity, be it of victim or perpetrator. We will discuss how this scientific construction of identity interrelates with character as a literary concept.

Recommended Secondary Reading:

Week 7/8: Technological Dependency

Primary Text: E.M. Forster, 'The Machine Stops' (1909)

These weeks will address the need we have for technology, and its need for us. In E.M. Forster’s short story ‘The Machine Stops,’ a machine serves all vital functions for humanity, but suddenly stops. The story presciently imagines technologies similar to instant messaging, tablet computers, and the internet. Are its predictions regarding technological dependence also prescient?

Recommended Secondary Reading:


Week 9/10: Inhuman Scale

Primary Text: Olaf Stapledon, Last and First Men (1930)

Across the 19th century and the beginning of the 20th, advances in geology and astronomy conspired to reveal that the Earth was much older than previously thought, and the cosmos much vaster. These weeks will consider how literature has dealt with the human implications of inhuman scale, focusing upon a novel with a two-billion-year timespan, Last and First Men by Olaf Stapledon.

Recommended Secondary Reading:
Week 11/12: The Conscience of Science


These weeks will address literature's approach to the relationship between scientific rationalism and religious faith. Aldous Huxley's *Island* is a “utopian phantasy,” in which a fictional kingdom, Pala, blends East Asian religious philosophy with Western scientific ideas. How does the balance between the rational and spiritual function in the novel, if indeed it does?

Recommended Secondary Reading:


Week 13/14: Genetics and Bio-Catastrophe

These weeks will address literature of biological catastrophe, focusing upon Margaret Atwood’s *Oryx and Crake* as an example. Humanity’s drive to alter nature for its own purposes, witnessed also in *Frankenstein*, may also have wider unintended consequences. How do we prevent technology designed for good from having disastrous results?

**Recommended Secondary Reading**

Hannes Bergthalller, ‘Housebreaking the Human Animal: Humanism and the Problem of Sustainability in Margaret Atwood’s *Oryx and Crake* and *The Year of the Flood.*’ *English Studies* 91.7 (2010): 728-743.


5. **Reading List**

In addition to the material above, the following texts are valuable for the course at large:


6. **Grading System**
Grades will be awarded on a 0-10 scale (per university standards). That is:

8-10: Excellent
6-7: Good
4-5: Satisfactory
0-3: Fail

7. Guidelines for Knowledge Assessment

75% of the final grade will come from an oral examination. This will take the form of a 10-15 minute prepared presentation, on a subject of the student’s choosing from a list to be distributed at the start of the course. The marking of the presentation will be weighted to reflect the time available to prepare (i.e. more clarity and depth of argument will be expected than for an exam where the questions are not known in advance).

The exam will be graded on:

50%: Content of argument. A strong paper will present and develop its own clear thesis.

25%: Use of sources. The paper should make appropriate, credited use of both primary and secondary material in building its argument. Moreover, it should be understandable which opinions come from secondary sources, and which are the student’s own.

25%: Organization. The paper should contain a clear progression of ideas.

A further 25% of the final grade will come from class participation. The focus will be on contributing to a thoughtful scholarly discussion. Original thoughts and penetrating questions generally advance the conversation more than second-hand facts. Don’t be afraid of being wrong; seminars will be a chance to experiment with ideas.

8. Methods of Instruction
Instruction will be via alternating lectures (14 academic hours) and seminars (14 academic hours).

9. **Special Equipment and Software Support (if required)**

No special equipment or software support are required for this course.