

MODULE DESCRIPTOR

MODULE TITLE	Great Astronomers in History					
MODULE CODE	AA1066 (L4)	JACS CODE	F500	CREDIT VALUE	20 credits	
DATE OF APPROVAL	April 2017				VERSION NUMBER	1
SCHOOL	Physical Sciences and Computing		PARTNER INSTITUTION	N/A		

RELATIONSHIP WITH OTHER MODULES

Co-requisites	NONE	Pre-requisites	None	Excluded Combinations	None
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MODULE AIMS

The aims of the module are to:

- Provide an introduction to the history of astronomy by focussing on some key individuals and issues in astronomy
 - Promote understanding both of the nature of historical study and the nature and dynamics of scientific discovery in its cultural context.
 - To provide an insight into the historical and philosophical context of astronomy and its impact on the development of science from a European perspective.
 - Encourage a broader perspective on astronomy by exploring the history of science.
- To enhance the student's key skills (IT and communication).

MODULE CONTENT

1. The nature of history and science
2. The Greek beginnings.
3. Nicholas Copernicus
4. Tycho Brahe
5. Johannes Kepler
6. Galileo Galilei
7. Jeremiah Horrocks
8. Isaac Newton
9. William Herschel: Galaxies and stellar dynamics
10. Theoretical and Observational Astronomy
11. Physics and Astronomy: the interconnection of science
12. Extra Terrestrials and the Emperor's New Canals?

INTENDED LEARNING OUTCOMES

On successful completion of this module a student will be able to:	
1.	Explain the nature of historical study as applied to science, recognising the need to avoid 'hindsight' with concepts not available to contemporaries
2.	Write a coherent, researched essay on the subject matter
3.	Recognise and explain the paradigmatic nature of science, and the dynamics of the development of scientific ideas
4.	Describe and illustrate the context in which key astronomers operated and developments in astronomy in the period up to 1900.

ASSESSMENT METHODS

Number of Assessments	Form of Assessment	% weighting	Size of Assessment/Duration/ Wordcount	Category of assessment	Learning Outcomes being assessed
1	Book Review	25%	1000 words	Coursework	1,4
1	Role Play Letter	25%	1000 words	Coursework	1,4
1	Essay	50%	2000 words	Coursework	2,3,4

MODULE PASS REQUIREMENTS

To pass this module you must achieve a mark of 40% or above, aggregated across all the assessments.

APPENDIX

MODULE CODE: AA1066 (L4)

MODULE TITLE: Great Astronomers in History

LOCATION OF STUDY: UCLAN CAMPUS

MODULE TUTOR(S)	Paul Marston
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MODULE DELIVERY	Semester Long	Semester 1		Semester 2		Semester 3	
	Year long	Semester 1 & 2		✓	Semester 2 & 3		
	Other (please indicate pattern of delivery)	DISTANCE LEARNING					

MODULE LEARNING PLAN

All modules should include details of the average learning time based upon 200 hours per 20 credits.

LEARNING, TEACHING AND ASSESSMENT STRATEGY

Distance learning students will learn via self-study, supported by detailed distance learning material supplied by the Course Team according to a Course Schedule. Tutorial support via online discussion forums, online classrooms email and telephone as required.

The learning materials include Course Notes and a *Workbook* containing the assessed coursework, comprehensive bibliography and guidance in preparing essays and book reviews. Additional material and suggested further reading is available via Blackboard.

The assessments are chosen to cover three periods of historical development of astronomy and to assess three different types of writing.

- The formal essay enables students to research materials from diverse sources, including relevant reprints of original sources (in translation if appropriate), critically compare them and write a coherent essay.
- The book review encourages students to use their knowledge of the module content to critically assess their selected book, and to highlight any strengths or errors in it.
- The role play letter requires students to have a detailed insight into the timeline of developments surrounding key individuals and to show awareness of the context in which the individuals lived. The style requires some 'creative writing' providing an opportunity for students to write in a different style than for formal essays or scientific reports.

SCHEDULED LEARNING AND TEACHING ACTIVITY

	<i>No. of hours</i>
Tutorial	8
TOTAL SCHEDULED LEARNING HOURS	8

GUIDED INDEPENDENT STUDY

<p style="text-align: center;">First reading of posted materials (equiv. to lectures) <i>Working through details</i> <i>Background reading</i> <i>Working on coursework assignments</i> <i>Reflection on feedback</i></p>	
TOTAL GUIDED INDEPENDENT STUDY HOURS	192
TOTAL STUDENT LEARNING HOURS (eg 200 hours per 20 credits)	200

BIBLIOGRAPHY AND LEARNING SUPPORT MATERIAL

On-line Booklist: <http://readinglists.central-lancashire.ac.uk/search.html?q=aa1066>