UNIVERSITY OF CENTRAL LANCASHIRE

Programme Specification

This Programme Specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided.

Sources of information on the programme can be found in Section 17

1. Awarding Institution / Body	University of Central Lancashire
2. Teaching Institution and Location of Delivery	University of Central Lancashire, Preston Campus
3. University School/Centre	Physical Sciences and Computing
4. External Accreditation	IOP (recognition)
5. Title of Final Award	Certificate in Astrobiology
6. Modes of Attendance offered	Distance Learning
7a) UCAS Code	n/a
7b) JACS Code	F590
8. Relevant Subject Benchmarking Group(s)	QAA: Subject Benchmark Statement for Physics, Astronomy and Astrophysics. Part A: Setting and Maintaining Academic Standards, February 2017. Part B: Assuring and Enhancing Academic Quality of the Quality Code, to be published. QAA: Subject Benchmark Statement for Physics, Astronomy and Astrophysics: Draft for Consultation, April 2016. QAA: Subject Benchmark Statement for Physics, Astronomy and Astrophysics, 2008.
9. Other external influences	National STEM Projects Institute of Physics
10. Date of production/revision of this form	April 2017

11. Aims of the Programme

- To provide an academically rigorous programme of education suitable for astronomy enthusiasts with or without previous formal qualifications.
- To provide an understanding of scientific laws and concepts as applied to the universe and astrobiology
- To provide an introduction to aspects of observational or laboratory science

- To develop elementary problem solving skills
- To provide the opportunity to develop skills and techniques used in astrobiology (astrophysics, biology and chemistry), which have wider application (these include data analysis, preparation of scientific reports.
- To enhance the student's key skills (communication, numerical skills, IT, time-management).

12. Learning Outcomes, Teaching, Learning and Assessment Methods

A. Knowledge and Understanding

A1. Describe biochemical and physical processes that take place in the universe with relevance to astrobiology
A2. Describe a range of environments capable of supporting a wide range of life forms
A3. Conduct a scientific investigation and rigorously report on the outcomes
A4. Solve elementary problems and apply appropriate practical skills

Teaching and Learning Methods

Course Notes with worked examples, self-test questions and solutions. Classroom tutorials and discussions via Elearn.
Feedback to students on assessed work, together with model answers to assessed questions.

Assessment methods

Continuous assessment via courseworks including: Questions Sheets with both mathematical and conceptual problems, experimental report.

B. Subject-specific skills

B1. Describe biochemical and physical processes that take place in the universe with relevance to astrobiology
B2. Describe a range of environments capable of supporting a wide range of life forms
B3. Conduct a scientific investigation and rigorously report on the outcomes
B4. Solve elementary problems and apply appropriate practical skills

Teaching and Learning Methods

Activities (home based experiments), on-line tutorials, self-test and assessed questions

Assessment methods

Formal Report on Activities

C. Thinking Skills

C1. Analyse information
C2. Draw conclusions from observational results and information sources.
C3. Solve elementary problems.

Teaching and Learning Methods

Exercises to do at home, including activities equivalent to science labs. Worked examples in course note, self-test question of simple problem-solving.

Assessment methods

Formal scientific reports. Question sheets with problems.

D. Other skills relevant to employability and personal development

D1. Use written communication (eg scientific reports, essays).
D2. Use numerical and IT skills and electronic communication via e-mail and internet.
D3. Plan and manage own time to achieve specific objectives.

Teaching and Learning Methods

Effective communication via the written word and electronic media, such as discussion boards.
Use of structured documents. Self-test questions. Manage personal study time to meet course deadlines.
Use IT to access course materials, produce electronic reports, etc.

Assessment methods

Experimental report, Mathematical/numerical problems in assessed question sheets.

13. Programme Structures				14. Awards and Credits
Level	**Module Code**	**Module Title**	**Credit rating**	
Level 4	AA1059	Introduction to Astrobiology	20	**University Certificate in Astrobiology** Requires 20 credits at Level 4: AA1059

15. Personal Development Planning

It is particularly important that the PDP offered by our courses is optional and flexible. Currently the following opportunities for PDP exist:

• The admissions process includes interaction between Course Leader and applicant, advising on suitability of the course, given a student's aspirations for short or long-term study.

• The induction process, using Handbook and Elearn links, provides opportunities for students to use the University's Skills and PDP resources.

• The Distance Learning courses provide a structured environment for independent learning and time management, to pace study and meet coursework deadlines.

• Self-test exercises encourage students to assess their academic progress within a module.

16. Admissions criteria

(Advanced standing is not available for Certificate awards.)

**Correct as at date of approval. For latest information, please consult the University's website.*

To study the Certificate in Astrobiology students are normally required to have GCSE grade C in Mathematics and English or equivalent high school qualification.

17. Key sources of information about the programme

Student Handbook
Astronomy Module Catalogue
uclan website
www.StudyAstronomy.com

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18. Curriculum Skills Map

				Programme Learning Outcomes																		
Level	**Module Code**	**Module Title**	**Core (C) or Option (O)**	**Knowledge and understanding**				**Subject-specific Skills**					**Thinking Skills**				**Other skills relevant to employability and personal development**				
				A1	A2	A3	A4	B1	B2	B3	B4		C1	C2	C3		D1	D2	D3		
LEVEL 4																					
	AA1059	Introduction to Astrobiology	C	√	√	√	√	√	√	√	√		√	√	√		√	√	√		

Note: *Mapping to other external frameworks, e.g. professional/statutory bodies, will be included within Student Course Handbooks*

19. LEARNING OUTCOMES FOR EXIT AWARDS:

No exit awards are available for Certificate awards.