

## 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***

<b>1. Awarding Institution / Body</b>	University of Central Lancashire
<b>2. Teaching Institution and Location of Delivery</b>	University of Central Lancashire, Preston Campus
<b>3. University School/Centre</b>	Physical Sciences and Computing
<b>4. External Accreditation</b>	RAS (endorsement) IOP (recognition)
<b>5. Title of Final Award</b>	Certificate in Astrobiology
<b>6. Modes of Attendance offered</b>	Distance Learning
<b>7a) UCAS Code</b>	n/a
<b>7b) JACS Code</b>	F590
<b>8. Relevant Subject Benchmarking Group(s)</b>	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.
<b>9. Other external influences</b>	National STEM Projects Institute of Physics
<b>10. Date of production/revision of this form</b>	April 2017
<b>11. Aims of the Programme</b>	
<ul style="list-style-type: none"> <li>• To provide an academically rigorous programme of education suitable for astronomy enthusiasts with or without previous formal qualifications.</li> <li>• To provide an understanding of scientific laws and concepts as applied to the universe and astrobiology</li> <li>• To provide an introduction to aspects of observational or laboratory science</li> </ul>	

- 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).

<b>12. Learning Outcomes, Teaching, Learning and Assessment Methods</b>
<b>A. Knowledge and Understanding</b>
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
<b>Teaching and Learning Methods</b>
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.
<b>Assessment methods</b>
Continuous assessment via courseworks including: Questions Sheets with both mathematical and conceptual problems, experimental report.
<b>B. Subject-specific skills</b>
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
<b>Teaching and Learning Methods</b>
Activities (home based experiments), on-line tutorials, self-test and assessed questions
<b>Assessment methods</b>
Formal Report on Activities
<b>C. Thinking Skills</b>
C1. Analyse information C2. Draw conclusions from observational results and information sources. C3. Solve elementary problems.
<b>Teaching and Learning Methods</b>
Exercises to do at home, including activities equivalent to science labs. Worked examples in course note, self-test question of simple problem-solving.
<b>Assessment methods</b>
Formal scientific reports. Question sheets with problems.
<b>D. Other skills relevant to employability and personal development</b>
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.
<b>Teaching and Learning Methods</b>
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.
<b>Assessment methods</b>
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	<b>University Certificate in Astrobiology</b> Requires 20 credits at Level 4: AA1059
<b>15. Personal Development Planning</b>				
<p>It is particularly important that the PDP offered by our courses is optional and flexible. Currently the following opportunities for PDP exist:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• The induction process, using Handbook and Elearn links, provides opportunities for students to use the University's Skills and PDP resources.</li> <li>• The Distance Learning courses provide a structured environment for independent learning and time management, to pace study and meet coursework deadlines.</li> <li>• Self-test exercises encourage students to assess their academic progress within a module.</li> </ul>				
<p><b>16. Admissions criteria</b> (Advanced standing is not available for Certificate awards.) <i>*Correct as at date of approval. For latest information, please consult the University's website.</i></p>				
<p>To study the Certificate in Astrobiology students are normally required to have GCSE grade C in Mathematics and English or equivalent high school qualification.</p>				
<b>17. Key sources of information about the programme</b>				
<p>Student Handbook Astronomy Module Catalogue uclan website www.StudyAstronomy.com</p>				
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**18. Curriculum Skills Map**

Level	Module Code	Module Title	Core (C) or Option (O)	Programme Learning Outcomes																			
				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.**