Programme Specification

1	Awarding body	University of London				
2	Teaching Institution	Birkbeck College				
3	Programme Title(s)	Graduate Certificate Planetary Sciences				
4	Programme Code(s)	GCGPLASC_C				
5	UCAS code	N/A				
6	Home Department	Earth and Planetary Sciences				
7	Exit Award(s)	N/A				
8	Duration of Study (number of years)	2				
9	Mode of Study	FT	PT	X	DL	Х
10	Level of Award (FHEQ)	6				
11	Other teaching depts or institution	N/A				
12	Professional, Statutory Regulatory Body(PSRB) details	N/A				
13	QAA Benchmark Statement	N/A				

¹⁴ Programme Rationale & Aims

Consistent with the general aim of the teaching provision within the College to provide higher education for people otherwise engaged during the day, through teaching in the evening and by Distance Learning, our Grad. Cert. Planetary Sciences aims to:

- Provide research-based teaching to enable students with a background in Earth Sciences to extend their knowledge and understanding to processes which formed and modified other planets within our solar system and beyond
- Provide a broad range of advanced modules that cover the origin and evolution of planets, informed by recent results from remote sensing, sample-return missions and meteorites
- Provide an opportunity for students to reach a depth of understanding of planetary sciences which would enable them to continue to post-graduate courses in planetary science.

15	¹⁵ Entry Criteria		
	Applicants would be expected to hold a BSc degree in Geology, Earth Sciences, Geological Sciences or equivalent, and to have a basic knowledge of the architecture of the Solar System (equivalent to having studied the 1st and 2nd year modules "Geology of the Solar System I" and "Geology of the Solar System II". Those wishing to enrol on the "Field Class for Planetary Science" module must have some previous experience of field work at undergraduate level.		

16	Learning Outcomes		
	Learning outcomes are similar to those of the BSc in Planetary Science with Astronomy (which includes all of the modules included in the Grad. Cert.):		
• To recognise and use subject-specific theories, paradigms and principles			

- To integrate information from a variety of different sources and to use qualitative and quantitative approaches to acquiring and interpreting data
- To collect, record and analyse data using appropriate laboratory (and field) techniques
- To use their powers of observation, analysis and imagination to make decisions in the light of uncertainty or missing information/data
- To undertake investigations in the laboratory (and field) in a safe manner, paying due attention to risk assessment, health and safety regulations, and sensitivity to the impact of investigations on the environment and stakeholders
- To understand individual and collective goals and responsibilities, and to perform in an appropriate manner, recognising and respecting the views and opinions of others
- To develop skills such as adaptability, a flexible attitude to work and study, to work independently and in teams, time-management, setting realistic targets

¹⁷ Learning, teaching and assessment methods

For each taught module, the students will be provided with lecture and practical material via Moodle. These comprise files containing full text, diagrams and images, together with practical material to study and analyse, such as numerical databases, planetary images, samples such as photomicrographs. Students will use standard packages such as Excel, Word, statistical packages etc, to collate, analyse, interpret and present results pertaining to their studies. Each module has specific pieces of assessed coursework, which may include reports, essays, experimental results, data interpretation, oral and poster presentations, and written examinations. The module "Field Class for Planetary Sciences" requires two reports on the geological history of an analogue planetary site, one written using only remote sensing, and the other written after visiting the site and examining it for 5-6 days.

18	Programme Description		
	To gain the Graduate Certificate, you must complete 60 credits of modules from the option available with no more than one option at Level-5.		

¹⁹ **Programme Structure**

Part Time programme

Year 1 or 2 (most modules are taught on a biennial basis; no more than 15-credits may be taken at level-5)

Level	Module Code	Module Title	Credits	Status*
6	SCES035H6	Remote Sensing and Planetary Surfaces	15	optional
6	SCES047H6	Exploration and Modelling of Planetary Interiors	15	optional
6	EASC059H6	Volcanism in the Solar System	15	optional
6	SCES022H6	Physical Principles of Astronomy	15	optional
6	EASC072H6	Advanced Topics in Planetary Science	15	optional
5	SCES055H5	Comets, Asteroids and Meteorites	15	optional
5	SCES054H5	Scientific Computing and Data Modelling	15	optional
5	SCES056H5	Field class for Planetary Sciences	15	optional
			Total 60	

Status*

CORE – Module must be taken and passed by student; COMPULSORY – Module must be taken, mark can be reviewed at sub-exam board; OPTIONAL – Student can choose to take this module

20	Programme Director	Professor Ian Crawford
21	Start Date (term/year)	October 2017
22	Date approved by TQEC	Autumn 2016
23	Date approved by Academic Board	Autumn 2016
24	Date(s) updated/amended	March 2019