Job Description

Postgraduate Teaching Assistants (PGTA)

Grade:	**6**
Hours:	**Variable depending on the module(s) worked**
Department:	**Geography**
Start Date:	**Spring Term 2021/22**
Application Deadline:	**5pm, Friday 26th November 2021**

Context / Duties & Responsibilities:

UCL Department of Geography is looking for expressions of interest for a number of Postgraduate Teaching Assistants (PGTAs) roles available in the Spring Term, 2021/22 academic year. PGTAs will be given training in support of their roles.

The purpose of these roles is to support teaching and learning in our modules working with the academic module coordinators. Responsibilities will vary depending on the module but duties may include:

- Leading seminars by designing and preparing teaching material within the overall module framework through the delivery of small group teaching. This may involve proactively planning delivery of teaching under the guidance of the module tutor/programme director, generating material for tutorials and liaising with other members of the module team to share best practice and ensure consistency.
- Supporting field-class activities (this may include travelling and staying away from home)
- Contributing to and maintaining the Moodle online learning facilities including providing assistance to students via forums, chats, FAQ guides etc.
- Marking formative assessments; generating and providing detailed written and oral feedback for students to ensure they clearly understand what is required of them. You may also respond to academic queries from students.
- You may be required to view pre-recorded lectures and undertake readings associated with the relevant module(s), and/or attend seminars, as agreed with the module tutor/programme director.

PGTAs will also be expected to:
- Attend module-planning meetings and other ad hoc meetings as deemed necessary by the relevant Module Convenor or Head of Department
- Keep attendance registers and mark-books in accordance with institutional and departmental regulations, and upholding confidentiality in regard to student records and marks.
- Complete mandatory training courses that may be required to comply with UCL policy for PGTA. (These may be scheduled before the contract start date.)
- Undertake appropriate development activities to support their teaching practice. UCL's Arena Centre for Research-Based Education offers a scheme for such training and development of PGTAs, called UCL Arena One.

- Actively follow and promote all UCL policies including Equality, Diversity and Inclusion policies.
- Observe fire and health and safety regulations.
- Carry out any other duties commensurate with the grade and purpose of the post as may be reasonably required by the Head of Department or their deputies.

Indicative hours of work provided below are the total hours anticipated for the whole term but they are subject to change depending on final student/group numbers.

PGTAs are expected to be able to commit to being present on the Bloomsbury campus during the terms for which teaching is allocated and during the examination period as required. It is the Department's intention to deliver all teaching in-person but, if things were to change due to the Covid pandemic (or for any other reason), teaching may take place remotely and the PGTA's place of work may be elsewhere.

Person Specification

The following list gives the pre-requisite skills and attributes necessary for all PGTAs but modules do also require specialised knowledge and/or experience. Please refer to the module list below for specific knowledge and/or experience required.

- Educated to Masters degree level, or have equivalent qualifications or experience, in a field related to the disciplinary area (Essential)
- Working towards a PhD degree in a relevant field (or having recently obtained such a degree) (Essential)
- High level of literacy and numeracy (Essential)
- Excellent working knowledge of MS Office software including Word, Excel, email and the internet (Essential)
- Ability to communicate clearly, both orally and in writing, and build good relationships with students, academic and professional services staff at all levels (Essential)
- Excellent organisational skills and ability to manage time and work to deadlines (Essential)
- Ability to be flexible and to respond to changing priorities in a busy environment (Essential)
- Ability to work independently as part of a team, recognising when advice / input needs to be sought (Essential)
- A high level of accuracy and a keen attention to detail (Essential)
- Strong enthusiasm for delivering high quality teaching across a variety of media, including both virtually and face to face (Essential)
- A commitment to equality, diversity, and inclusion in higher education; making inclusivity, diversity and (inter) cultural awareness core to actions and decision-making for self and team; and encouraging input from diverse voices to support making fair, fact-based decisions.
- Commitment to continuous professional development and completion of the UCL Arena One Workshop (either before or after application) (Essential)
- Previous teaching experience (Desirable)
- Proven ability to use Moodle and Blackboard Collaborate or equivalent online learning technologies (Desirable)

The above is not an exhaustive list of responsibilities but covers the main components of the role. The post holder may be asked to carry out other specific tasks and duties as required by the Line Manager, Head of Section or the Head of Department.

How to Apply:

Applications should be sent to Claire Betts (c.betts@ucl.ac.uk) by 5pm Friday 26th November 2021 and should take the form of a single email consisting of:

- A brief CV (include all contact details)
- Which modules you are most interested in teaching
- Covering letter detailing how you meet the person specification requirements of the role
- Evidence of your right to work in the UK – see Appendix B.

Informal questions about the post and the Department may be directed to Claire Betts, Department Manager (c.betts@ucl.ac.uk). We will aim to contact successful applications prior to the Winter break. If you have not heard from us by the end of December then I'm afraid we have not been able to progress your application on this occasion.

Specific knowledge and/or experience required:

Further information on each of the modules is available on the next pages and at: http://www.geog.ucl.ac.uk/current-students/undergraduate/modules and http://www.geog.ucl.ac.uk/admissions/masters/msc-modules/

Please note: the indicative hours of work are the total hours anticipated for the whole term and they are subject to change depending on final student/group numbers. We have given an indicative number now so you have a sense of what is expected. The total indicative hours also includes payment for training you will be provided.

Where marking is expected, this is formative marking and there will be hours given for marking and to provide feedback to students. As it's difficult to predict how many student will submit their work, contracts are calculated to include marking (and then the associated feedback time) for 50% of the expected module enrolment. The indicative total hours of work shown below reflects this calculation. If more than 50% of the module enrolment submit their work, an additional payment will be made to ensure PGTAs are not underpaid for the work they have done.

Module	Brief overview of module	Essential skills required	Desirable skills required	Marking & feedback	Indicative <u>total</u> hours of work across term
Exam Practice (2nd years)	2nd year students will be invited to submit a practice exam question in April on any of their modules with exams e.g. Geocomputation, Development Geography, Environment and Society, Political Geography and Geopolitics, Urban Geography. We are therefore looking for somewhere between 2 and 5 PGTAs available to mark these practice exams within a 2-week window during April with preferably diverse knowledge of geography as a discipline as there's no way to predict in advance which exam subjects will prove most popular. Exam practice essays will be 1000 words in length.	Experience of assessment in geography Knowledge of relevant sub-disciplines within geography Good organisation and ability to work under pressure as this task is time-sensitive	Good writing skills for providing feedback	Yes	**31.3 hours to be split across 2-5 PGTAs**
Environmental Modelling for the London NERC DTP	This teaching is a compulsory element of the first-year training for all NERC-funded PhD students across many institutions in London. The module aims to introduce students to the basics of numerical modelling, and has been designed to dovetail with their training in statistics. As part	- Experience with coding up models. - Sufficient knowledge of climate science to be able to explain what a scenario is. - Good communication skills	- Having participated in this training in previous years. - Knowledge of R or python (with a slight preference for R)	No	**6 hours**

	of the training, students are set a challenge to design, code and apply a climate emulator. The group task has been the same for several years and is also used in GEOG0109. A PGTA is required to provide assistance to the group as they build their models. A key component of this assistance is debugging of student-written code. Additionally, it will entail guiding students in the implementation of the model and translating discipline-specific jargon. The students are taught R by UCL Statistical Science, but some have chosen to write the model in python in previous years. The contact two sessions, each of 2 hours, will take place between Tues 11th and Thurs 13th Jan at mutually agreed times.		- Experience of having given a research oral presentation		
GEOG0008 Environmental Change	This introductory course deals with changes in environment on a variety of timescales, causes of natural environmental change and impact of people from the last glacial stage up to the present. PGTA tasks involve supporting students in their understanding of course material and of the formative assignments	Strong background in physical geography, environmental science or earth science, and at least a general understanding of global environmental change	Understanding of basic moodle functionality	Yes	**38.3 hours**
GEOG0014 Geography in the Field II	THIS MODULE REQUIRES PGTAS WITH DIFFERENT SKILL SETS. PLEASE SPECIFY IN YOUR APPLICATION IF YOU ARE APPLYING FOR SKILLS SET 1 OR 2 (YOU MAY APPLY FOR BOTH): SKILL SET 1 & 2: 'Geography in the Field II' uses London as a means of developing geographical skills, insights	SKILL SET 1 & 2: Good general knowledge of different forms of fieldwork and basic data analysis used in Geography, ideally straddling human and physical approaches	Interest in, or experience of, researching urban issues, especially in relation to London.	SKILL SET 1: Yes SKILL SET 2: nO	**SKILL SET 1: 3 x PGTAs – 32.4 hours each** **SKILL SET 2: 3 x PGTAs – 11 hours each**

	and engagement. The aims of this module are to 1) provide initial training in human and physical geography techniques that will be crucial in subsequent modules, 2) provide practical experience of a wide range of data collection and interpretation methods in a variety of settings, and 3) foster both independent and team working skills. ADDITIONAL INFO FOR SKILL SET 2: One of the practical sessions involves the use of base R to undertaken basic analysis of visualisation of air quality data downloaded from Defra website.	ADDITIONAL ESSENTIAL SKILLS REQUIRED FOR SKILL SET 2: Good general knowledge of R for basic statistical analysis and visualisation of data			
GEOG0021 Reconstructing Past Environments	THIS MODULE REQUIRES PGTAS WITH DIFFERENT SKILL SETS. PLEASE SPECIFY IN YOUR APPLICATION WHICH SKILL SET YOU ARE APPLYING FOR (YOU MAY APPLY FOR MORE THAN ONE/ALL IF RELEVANT): SKILL SET 1: Assist with a local (0.5 day) fieldtrip to a small lake SKILL SET 2: Run a computer -based coursework help sessions for a radiocarbon exercise using OXCAL SKILL SET 3: - Run a computer -based coursework help sessions for a diatom data exercise using C2 -Help with a practical microscope session using ostracods	Familiar with C2, OXCAL, palaeo/limnological field work and data, familiar with diatoms and ostracods	General expertise in past environments	No	**SKILL SET 1: 9 hours** **SKILL SET 2: 15 hours** **SKILL SET 3: 11 hours**

	-Help with a practical microscope session using diatoms				
GEOG0027 Environmental Remote Sensing	Provide support to teaching and student learning in practical sessions in remote sensing. The course is an introductory level undergraduate course in remote sensing and environmental modelling. Practicals in the first half of term are on core remote sensing topics, starting with basics of image display and enhancement and moving up to image classification. 2-hour weekly practical sessions enable the students to explore the concepts covered in lectures. The practicals are strucrtured, and run by the course convenor. The PGTA provides in-class support to students, helping them do the practicals and learn from them, and helping answer any questions they have. The PGTA will always be able to refer to the convenor if they are unable to deal with any question. Course details on https://github.com/profLewis/GEOG0027	Ability to help students in computer-based practicals.	Some knowledge of remote sensing topics would help, but because of the level this is pitched at, this could be picked up by the PGTA from the notes provided. Some knowledge of and experience in using ENVI software helpful, but not essential as again, this could be picked up by the PGTA from the notes provided. Some knowledge of other geospatial computing of value, including google earth engine, running python scripts, but again not essential as detailed noted provided on this and support given from the convenor on anything beyond the PGTA current skills.	No	**33 hours**

GEOG0028 Urban Geography	This module provides an introduction to the sub-discipline of urban geography and explores the distinctive contribution that geographers have made to the analysis of cities and urban life. The course outlines the economic and social origins of urban life, exploring the relationship between population density, size, and diversity that characterise cities. The course systematically outlines how contemporary cities can be interpreted as economic spaces, social spaces, and political entities. It also explores the different ways that urban geographers have framed their research into cities and urban environments. As a PGTA for this course, your tasks will include delivering two weeks of seminars (Weeks 4, 6, and 10); assisting with fieldtrip support in Week 10; and marking a formative assessment submitted by students in Week 5.	Excellent written and oral communication skills Excellent interpersonal and presentation skills Ability to lead seminars independently Ability to teach and deliver academic content to small groups Expertise in human geography	Expertise in urban geography	Yes	**39.6 hours**
GEOG0029 Cultural & Historical Geography	For this module students choose a series of objects from the UCL museums and library special collections to explore a theme of their choice relating to ideas in cultural and historical geography. The course is a series of lectures on themes such as landscape and mapping and course practicals that are created to help the students undertake additional research required for the coursework. There are also seminars on readings from the course	A familiarity with geographical works in cultural and / or cultural geography; experience of working in archives for research purposes.	An interest in digital archives, museum geographies and / or critical heritage studies.	Yes	**22.2 hours**
GEOG0030 Geocomputation	The module aims to provide an introduction to the principles of spatial analysis and the use of programming for spatial analysis. The purpose of this module is to equip undergraduate students	Substantive knowledge and use of RStudio, QGIS and/or ArcGIS for GIS analysis.	Able to run online and in-person practicals as well as help problem-solve IT and	No	**38 hours**

	with an understanding of the principles underlying the conception, representation/measurement and analysis of spatial phenomena as well as how to use programming software, primarily the R programming language with the R-Studio software environment to complete this analysis. The PGTA will be expected to attend the scheduled online/in-person seminar-practical alongside the relevant member of staff and help students as and when questions or problems arise.		programming issues with students.		
GEOG0031 Statistics for Environmental Geographers	The range of discipline-specific skills developed through a geographical education should normally include statistical analyses. This ensures that students and researchers gain the necessary knowledge to develop a deeper understanding of scientific papers read, and research projects carried out. Taking GEOG0031 will ensure students: -Develop an understanding of theoretical concepts commonly used in statistical techniques for environmental scientists -Develop an understanding of when and how to use appropriate statistical techniques -Gain knowledge in a range of statistical software packages -Gain knowledge of univariate and multivariate techniques -Gain knowledge of transfer functions -Gain an understanding in effective data presentation	Knowledge on how to undertake ordinations and interpret results	Transfer functions	No	**38 hours**

GEOG0034 Coastal Geohazards	This course introduces the fundamental processes that make coasts naturally dynamic, and also covers sea-level rise as a progressive geohazard that emerges from the interplay of climate change and vertical land movements of both natural and anthropogenic origin. Subsequent sessions cover specific hazards arising from shoreline erosion, storm surges and coastal flooding.	Practical/working knowledge of GIS and Matlab	Experience supporting computer practicals	Yes	**25.3 hours**
GEOG0035 Environmental GIS	Computer practical module covering a wide range of geospatial processes and analyses focusing on different types and forms of environmental data. The main sessions cover: -Principles of cartography; Coordinate systems and projections -Types and sources of spatial data; Raster and vector data -GIS software and capabilities -Integration and organisation of spatial data in a GIS -Georeferencing and image analyses -Spatial analyses in GIS -3D visualisation and data presentation	Knowledge and practical experience of using QGIS	Knowledge of GIS more generally, geospatial datasets and analyses Experience supporting computer practicals	Yes	**2 x PGTAs – 45.3 hours each**
GEOG0039 Migration and Transnationalism	Optional 3rd year undergraduate module. There are 3 seminars throughout the term and four groups. The course is mainly delivered by 2 hour lectures. The PGTA will run 1 (out of 3) of the discussion seminars during weeks 21, 24 and 28.	Some knowledge of issues around migration/transnationalism. Ability to run an engaging participatory in person discussion of set readings. Effective communications required to set up classes.		No	**15 hours**

GEOG0051 Mining Social and Geographic Datasets	This course will provide an in-depth overview of the theoretical foundations, algorithms, systems and tools for mining massive social and geographic datasets, and, more in general, an introduction to the fascinating emerging field of Data Science. The module will also provide practical data science skills for a variety of application domains. The coursework will be based on a programming project related to the analysis of social and geographic datasets in Python.

PGTA support for the quantitative section of this course will involve:
1) Running computer lab practical sessions.
2) Providing support to students through bookable weekly office hour slots and the monitoring of the Moodle forum. | Experience working with Python and its libraries: numpy, pandas, geopandas, network, matplotlib and sklearn.

Familiarity with quantitative methods such as spatial network analysis, machine learning analysis. | Familiarity with details of Machine Learning Methods (ie. Logistic Regression, Kmeans clustering, Principal Component Analysis, decision trees, word embeddings) as well as Social Network Analysis. | Yes | **2 x PGTAs – 44.8 hours each** |
| **GEOG0056 Geopolitical Events** | The course aims are as follows:
-to familiarise students with social sciences and humanities thinking on the idea of the event
-to link ideas of the event with ideas of geopolitics
-to develop conceptual and empirical understanding of specific geopolitical events
-to deepen knowledge and understanding through independent study of a particular case study
-to facilitate critical reflection on the epistemology and politics of geopolitical events

The PGTA will run two sets of seminars and mark/feedback on formative assessment, | Knowledge of political geography/geopolitics

Ability to run seminars on particular geopolitical events and the analytics and politics of truth surrounding them in relation to, for example, official inquiries, conspiracy theories, memorials and works of art.

Ability to provide formative feedback on a 1000-word portfolio of writing to | Ability to teach critical literatures on to political geography/geopolitics, politics of truth, public practices. | Yes | **15.4 hours** |

	comprising a portfolio of 1000 words of notes on the first half of the course.	enhance student skills and thinking.			
GEOG0063 Overseas Field Class: Gilbralter	This is a field class, to be run in the Easter break after Term 2 is over. The module focuses on the political geography of Gibraltar, both historical and in terms of its contemporary issues (e.g., Brexit, sovereignty disputes with Spain, etc.). The selected PGTA will assist with two pre-trip class sessions, and also attend and assist on the field trip itself. The PGTA will develop a day's worth of content for the field class as well and deliver it. Please note you will need a valid passport (and visa as appropriate) and Covid-related requirements may be enforced.	Knowledge of relevant political geography literature Basic knowledge of Gibraltar	Ability to read, write, and speak Spanish.	No	**59 hours**
GEOG0064 Global Urbanism	This module provides an overview of different approaches to global urbanism, or different ways of thinking more globally about cities. It mobilises various theoretical frameworks (e.g. postcolonial/southern theory, regional approaches, comparative approaches, planetary urbanisation) to discuss several key thematics in global urban studies such as financialisation, urban development, policy circulation, migration and race, planning, informality, sustainability, gentrification/displacement. The module uses bi-weekly seminars to help students build their own comparative report, bringing London in dialogue with a city of their choice around a policy theme (last year: affordable housing, resilience, or land value capture). The PGTA would help run two weeks' worth of seminars to help students work through the practicalities of comparison and	Excellent knowledge of core global urban studies debates, with expertise and interest in at least one theme covered in the course. Detailed knowledge of at least one urban context and region.	Experience leading interactive undergraduate seminars and support student projects. Ability to edit and manage the course Moodle site (this can be learned during the course).	No	**18 hours**

	report-writing, with possibility of tailoring one of the report themes around their area of research (to be discussed). We will also be running a London-based field trip at the end of term, conditions allowing, which the PGTA would help set up and run.				
GEOG0067 Surface Water Modelling	This module commences with an introduction to hydrodynamic modelling (including numerical schemes, dimensionality, boundary conditions and the construction of computational meshes and grids). A simple 1D tidal model is implemented in Matlab to demonstrate fundamental principles. Hydrological modelling is introduced, with particular reference to catchments and their sensitivity to climate change. A practical session provides hands-on experience of using the MIKE SHE modelling system. Coastal and estuarine circulation modelling modelling is also covered and another practical session takes students through the implementation of a Telemac 2D finite element model of a port facility. The course also covers key issues associated with the provision of boundary condition data and model validation.	Practical/working knowledge of Matlab, Telemac2D, and MIKE SHE	Experience supporting computer practicals	Yes	**26.1 hours**
GEOG0086 Advanced Geopolitics	The looks at how geopolitical events and disputes are constituted and contested as matters of public concern. The module draws on theories of geopolitics, security, secrecy and publicness and examines public and parliamentary inquiries, criminal investigations, and open-source investigations. This year the module focuses particularly relations between Russia, Britain and	Familiarity with critical thinking on political geography/geopolitics. Ability to provide formative feedback on reflective portfolio written by students on weeks 1-5 of the course.	Familiarity with academic literatures in critical and materialist geopolitics, critical security studies, material publics; Russia-Western relations.	Yes	**7.2 hours**

	other western countries since the end of the Cold War.				
GEOG0099 Cities and Climate Change	This is an inter-disciplinary module that cuts across the Human and Physical Geography MScs and draws students from all programmes within the department and beyond (although it is examined by the MSc HG exam board). The module is taught jointly by Chris Brierley and Pushpa Arabindoo as they seek to explore in-depth what it means to be say 'cities are part of the problem as well as the solution to climate change'. We do this in two parts – the first half of the course looks at epistemologies across human and physical sciences, methodologies, and how this translates into desirable solutions such as nature based solutions. The second half of the course unpacks the category of low-carbon transitions which has become key to understanding cities as problems as well as solutions. This will be done by looking at built environment, transport and energy sectors. The module is assessed through two assessments – students have to prepare a climate change indicator profile for a city of choice (initially in groups and subsequently as individuals), and write a critical essay on urban climate change challenges. We foresee the need for a PGTA to work with the students in groups helping them choose a city for the climate change indicator report and identifying appropriate indicators. The lecture/seminar runs on Fridays from 11-1 and 1-2 is set aside as a group work hour where the presence of a PGTA will be very helpful.	A good understanding of the cities and climate change discourse.	Managing group work dynamics and enabling consensus in terms of choosing the city and indicators. Help them think rigorously through what makes an indicator (most groups stumble at this key requirement of the assignment).	No	**22 hours**

GEOG0101 Ocean Circulation and Climate Change	Module teaches the major features of the global ocean, how circulation has changed in the late Quaternary, and what changes are happening now and are likely in the future. The course is heavily based around literature reading and subsequent discussion activities – many of which are held as various types of breakout groups. PGTA support is needed to help with discussion sessions, especially when breakout groups are held, to ensure individual groups get the support needed.	Good knowledge of oceanography and role of ocean in late Quaternary climate change. Good skills at explaining complex ideas, and teaching how to review and critique scientific literature.	Enthusiastic and good communicator	Yes	**38.3 hours**
GEOG0107 Aquatic Macrophytes	A fieldcourse run in Dorset focusing on wetland plant identification, survey, ecology and conservation science	Ability to identify wetland plants to species level Knowledge of wetland plant survey methods		No	**53 hours**
GEOG0113 Terrestrial Carbon Modelling & Monitoring	Provide support to practical classes in Terrestrial Carbon Modelling and Monitoring. There are two course practical sessions, which combined, help the students learn about modelling and monitoring global and regional patterns of terrestrial carbon activity. The first practical runs computer codes in an online notebook to examine global patterns of solar radiation. The second, also in an online notebook, uses existing codes to model photosynthesis at different locations and times, for different land use types. Not all students taking the course have detailed computer coding training, so the course notes	Ability to help students in computer-based practicals essential. Patience. Some basic understanding of broad patterns of solar radiation (to the level of appreciating the role of the seasonal/latitudinal variations).	Some basic knowledge of terrestrial carbon process, at least in appreciating what photosynthesis is, would be useful, but to be honest, this could be picked up from the notes and a little preparation. Some understanding of modelling vegetation processes wrt carbon would be of value, but not essential. Again, this could easily be picked	No	**2 x PGTAs – 11 hours each**

	are all aimed at using, rather than developing, models, and creating some experimentation around the sets of examples provided. There are likely to be up to 40 students in the class, in a UCL computer cluster room, with all software being accessed through a browser (jupyter notebook). The PGTA will help to guide the students through the practicals, answering any technical or subject-area questions they can, or referring them to the course convenor (who will also be there) if they are not able to do directly answer. Course details on https://github.com/UCL-EO/geog0133		up from the notes and a little preparation. Some experience with running jupyter notebooks would be useful, but its quite easy to do, so experience not at all necessary.		
GEOG0121 Climate Modelling	This module introduces students to climate models. The course will be taught via online lectures and in-person practicals. The assessments revolve around analysing and visualising simulation output from the Met Office's UKESM.	Knowledge of python via Jupyter notebooks Experience of debugging code Understanding of basic numerical techniques used in environmental modelling Good communication skills	Experience of xarray Familiarity with linux, preferably delivered via a JupyterHub Knowledge of NASA's Panoply software Ability to direct student research, via pertinent questions	No	**53 hours**
GEOG0122 Biological Indicators	THIS MODULE REQUIRES PGTAS WITH DIFFERENT SKILL SETS. PLEASE SPECIFY IN YOUR APPLICATION WHICH SKILL SET YOU ARE	SKILL SET 1: Diatoms SKILL SET 2: Pollen	Palaeolimnology, palaeoceanography, palaeoecology	No	**SKILL SET 1: 15 hours**

	APPLYING FOR (YOU MAY APPLY FOR MORE THAN ONE/ALL IF RELEVANT): The module is taught in 5 x 2 week sections concentrating on a different biological indicator so we need PGTAs to assist with microscope practicals on the following: SKILL SET 1: Diatoms SKILL SET 2: Pollen SKILL SET 3: Foraminifera SKILL SET 4: Macrofossils SKILL SET 5: Ostracods	SKILL SET 3: Foraminifera SKILL SET 4: Macrofossils SKILL SET 5: Ostracods			**SKILL SET 2: 2 X PGTAs – 15 hours each** **SKILL SET 3: 15 hours** **SKILL SET 4: 2 X PGTAs – 15 hours each** **SKILL SET 5: 15 hours**
GEOG0125 Advanced Topics in Social & Geographic Data Science	The module aims to teaching the following: -Advanced knowledge of quantitative methods from a statistical and machine learning point-of-view -Parametric and nonparametric approaches for hypothesis testing of problems related to social phenomena and its spatial components. -How to apply various families of multivariable models from a Frequentist and Bayesian school of thought, and more importantly, using Bayesian model-based geostatistics for making spatial predictions and studying the associations between social-risk factors and outcomes -How to apply various image processing and deep learning techniques on tackling future social geographical challenges.	The following essential skills are required: -Working knowledge and use of RStudio for statistical and GIS analysis. Includes statistical knowledge includes basic descriptive statistics, parametric and non-parametric hypothesis testing and various types of multivariable regression models. - Working knowledge and use of Python for machine	The following desirable skills are required: -Able to run in-person practical sessions as well as help problem-solve IT and programming issues with students. -Basic knowledge of Bayesian statistics, R-INLA and Machine Learning techniques (e.g., Deep learning and Neural network). If you are new, a willingness to		2 x PGTAs – 44.1 hours for one position & 21.1 hours for the second position

	-Advance programming in software packages such as R/RStudio and Python	learning and deep learning in Tensorflow.Keras.	learn the main programming principles and techniques is fine.		
GEOG0128 Issues in Global Migration	Core module for MSc Global Migration with ten 'migration issues' addressed by multiple inter-disciplinary scholars from UCL connected to the MRU. Each topic has a live seminar led by a member of academic staff. The PGTA's role is to prepare students for that seminar by running a session in advance of the seminar focused on the required reading.	Knowledge of inter-disciplinary Migration Studies. Ability to run an engaging participatory online discussion of set readings. Effective communications required to set up classes.		No	**30 hours**
GEOG0140 Urban Practices	This module is a core module for MSc Urban Studies in term 2. It explores and experiments with multiple ways in which urban issues, problems and experiences are identified and addressed in practice. A series of invited speakers lead seminars outlining and reflecting on the practices they adopt. This year we have a focus on 'emergency urbanism'. The module involves students working in small groups of 3 or 4 developing a project that responds to the theme from a practice-based perspective. Given the unconventional nature of the course, and the demands of liaising with group members and external practitioners, a strong level of PGTA support is required. Two PGTAs will be required to run weekly sessions with these small student groups to discuss how they develop their engagement with their projects and formulate a particular and distinctive response	-Close familiarity with urban theory and debates on cities and urbanization. - Comfortable exploring relations between urban theory and professional practice, and engaging with the challenge of putting academic ideas to work on 'real-life' urban issues -Confidence in advising students and helping to support them on term-long group projects		No	**2 x PGTAs – 30 hours each**
GEOG0150 Space and Society	Within contemporary human geography, 'space' is a central and defining concept. However, the meaning of space is far from self-evident. This	Ability to lead small group seminars		Yes	**43.1 hours**

	course will explore the ways in which geographers have contributed to this discussion, conceptualising space as (1) 'relationally' produced, constituted in and through connections, flows and networks; and (2) involving the production of 'territories', borders and boundaries through measurement, delimitation, representation in maps and through lived experiences and practices. This course foregrounds understandings of space in relation to critical analyses of how societies are constituted, drawing on examples which illustrate these different approaches to the relationship between society and space.	Familiarity with concepts of 'space' in contemporary human geography

Ability to work closely with course convenor to prepare and report back on seminars

Ability to manage workload and meet marking deadlines | | | |
| **GEOG0152 Introduction to Citizen Science and Scientific Crowdsourcing** | This course aim is to introduce students to the theory and practice of citizen science and scientific crowdsourcing. Citizen science is the participation of members of the public in a scientific research project, including the engagement of a very large group of people in the creation of new scientific knowledge by using online tools (crowdsourcing). By taking the module, students will explore the history, theoretical foundations, and practical aspects of designing and running citizen science projects. The course is based on taking part in different citizen science activities and experiencing them and sharing information with other students. There is also a part that is dedicated to the development of an app using the Sapelli software. | Some familiarity with citizen science; willingness to try and work with projects across different scientific domains | Familiarity with Sapelli and Sapelli designer; Familiarity with Moodle and UCL eXtend; Experience in participation in citizen science projects | No | **2 x PGTAs – 33 hours for one position & 23 hours for the second position** |

| GEOG0155 Social Science Research Methods and Methodologies (Quant) | GEOG0155 provides human geography MSc students with an introduction to key quantitative social science research methods. The course begins by outlining the steps needed to design a successful piece of quantitative research. We then move on to cover key quantitative methods including t-tests, correlation, regression and the use of GIS and geospatial analysis methods (e.g. tests of spatial autocorrelation).

PGTA activities will involve supporting the course convenor by holding computational support office hours and monitoring an RStudio problems forum. | Experience working with RStudio

Familiarity with quantitative methods such as multiple regression and basic use of GIS. | Prior teaching experience with RStudio. | No | **24 hours** |
| GEOG0170 Environmental Conequences of Human Activity | Module teaches fundamental concepts relevant to environmental damage resulting from human activity. These include the sources, evolution, persistence, and fate of contaminants.

Topics covered include air and plastic pollution, biogeochemical cycles, ecosystem change and adaptation, biodiversity loss, and policy measures to mitigate environmental damage.

PGTA support needs include coordinating and leading a site visit to a local waste processing plant, guiding students through a data analysis project, facilitating discussions at seminars. | Good knowledge of sources and cycling of contaminants through the atmosphere and terrestrial and aquatic ecosystems. Basic data analysis skills using Excel and Python. | Enthusiastic, good communicator. | Yes | **49.7 hours** |