M.SC./DIPLOMA IN GEOGRAPHICAL INFORMATION SCIENCE, GEOGRAPHICAL INFORMATION SCIENCE & ARCHAEOLOGY AND GIS BY RESEARCH

SESSION 2022/2023

Business Geographics

Staff:	Dr Adrian Tear (Course Leader) Mr Mark McLauchlan (Week 4)				
	Mr Bruce Gittings (MSc GIS Leader)				
Blocks:	3	Credits:	10	Prerequisites:	None

Lectures (Day,	Monday (16/01, 23/01, 30/01, 06/02, 13/02)		
Time and	Lectures 1, 4 and 5	Lectures 2 and 3	
Location):	ECCI @ 1000-1300	Zoom 1000-1300 online!	

Course Aims:

Growing utilisation of spatial information in the commercial and governmental domains is moving GIScience outside its longer established and more traditional roles in cartography, facilities management etc. This course introduces participants to different types of corporate structure and to the use of GISystems and GIScience in business, government, and third-sector organisations.

We examine the purpose and structure of companies, internal/external service provider models, business ethics, processes and professionalism, GIS consultancy and the role of the adviser. The course concludes with a discussion of current issues surrounding Big Data, open data, open-source software, legal frameworks and opportunities for company formation and growth.

The Business Geographics course comprises these core activities:

- A series of lectures and workshops on key topics.
- Role-playing exercises and writing designed to hone professionally relevant skills.
- The AGI/EEO professional seminar series which students should attend.

Students should appraise themselves with the timing of the <u>AGI/EEO professional seminars</u> and ensure they plan work around them and the GeoDrinks that follow. Attendance is compulsory.

Programme: (Lectures and Workshops)

1.	What, why and how of business: What is a company? Does it have to be a company? How to set up a company? Fundamentals of Business Geographics: Space <i>and</i> Time. Atomic and aggregate analysis. Data, Software, Consultancy.	АРСТ
2.	Data and projects : Census. BARB/ISBA. Postal Geography. Administrative Geography. Profiling. Market Research. Target Group Index. Business mapping. Walk-through of past, relevant projects.	АРСТ
3.	Software and development : Databases, Systems and Software development. CenSys bespoke mapping and profiling system. Software design methodologies. Walk through of past, relevant software development projects.	АРСТ

4.	GIS in Business : Ethics and professionalism. Client confidentiality. Data and process value. Products or services? Example applications / use cases: Who is using GIS? Maps everywhere. Future employability.	
5.	Issues of the moment and future opportunities : Desktop, Web, and Mobile applications. Spatial SQL. Open Data. Open-Source software. Virtualisation. Big Data. Social Media. Sensor data. Software/Platform as a Service. Cloud computing.	APCT

Assessment:

Form	Details	Weight
Individual write-up	 Car Manufacturer Advertising Tender You are working in the geographic support section of a major advertising agency. The agency has been approached by an upmarket German carmaker to pitch for its UK advertising business, worth around £22m/year. Media requirements include television, radio, outdoor advertising. How would you allocate the advertising spend a) by media type, and b) within media type; geographically? Submit Executive Summary (≤1,500 words, ≤20 bullets) SET WK2, DUE MONDAY WK3 	30%
Software development project plan and group presentation	 Geodemographic/GIS analysis system Your company has been approached to build a bespoke geodemographic and GIS analysis system covering UK markets. Present your firm's credentials and quote to the joint MDs, Mr Gittings and Mr McLaren, who are busy men, and will only have 10 minutes (and at most 3 questions) for each consultancy firm. Weighted 40% presentation, 60% write-up Submit an individual 3-5 page letter detailing your quote SET WK3, DUE MONDAY WK4 	30%
Practical Exercise	Social Media Data Analysis Exercise You are working for a polling company in France. Your colleagues have collected some social media data during the 2012 French Presidential Election and pointed you towards a ZIP archive containing a Comma Separated Values (CSV) file with the content. Use whatever software (Excel, GIS, Tableau) you are comfortable with to produce selected Maps, Graphs, Tables, Word Clouds etc. • Submit a 6-10 page report of your analyses • SET WK5, DUE FRIDAY WK6	40%

All exercises require research, contextualisation and correct academic referencing.

Learning Outcomes:

By the end of this course, students should have achieved and demonstrated, or be able to achieve and demonstrate, the ability to:

- Understand typical UK private sector Company structures, ownership and governance characteristics.
- Consider different models of shareholder ownership and professional responsibilities within business (and analogies within government/third-sector) through group work.
- Set up a new business (Limited Company) or partnership (LLP), understanding rules and reporting responsibilities.
- Understand the value of different types of geographic information in various settings and consider ways to exploit its use.
- Consider how and why ethics and professionalism are important, whether as an internal or external GIS Expert or Consultant.
- Project plan a number of GI solutions involving open source, public sector and other types of geographic data.
- Appreciate the future opportunities for use/analysis of geographic information as it gets 'bigger', potentially more 'open' and certainly more pervasive.
- Develop communication, management and interactive skills relevant to different types of organisational structure and service delivery mechanism.
- Locate, read and summarise relevant literature, from both traditional and online media, to extend understanding of topics.
- Take responsibility for learning through reading and the preparation of assignments, reflecting upon the learning experience.

Selected References:

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