Core modules

Community Project Management	
Module Ref No:	
Date of Validation:	**2020**
SCQF Level:	**9**
SCQF Credits:	**15**

1. Rationale	
Involving local communities, communities of interest and stakeholders is a key part of work in a wide range of contexts today. Indeed, in practical terms, key sources of funding can only be accessed via engagement with community groups. Policies and initiatives are continually being developed that give this approach impetus. The approach requires a different style of working – as facilitator rather than leader. There are a wide range of agencies, approaches and people involved in this work. It is therefore vital that students have a clear understanding of the principles that underlie this type of working, good practice in implementation and the different roles played by different agencies/workers. The complexity of funding environmental projects and the potential sources and difficulties of managing multiple funders needs to be considered for successful projects.	
2. Learning Outcomes	
At the conclusion of this module the student should be able to:	
LO1:	Assess different communities by recognising the different roles and principles required in community development.
LO2:	Evaluate current community development techniques when determining how to approach a community-based project in terms of planning, designing and engaging.
LO3:	Evaluate project management principles, people management concepts and leadership approaches when formulating community engagement projects.
LO4:	Employ key skills in the application for community development funding.
3. Content	
3.1	**Community theory and analysis** – the concept of community is a sociological construct and how different types of communities function has historically developed due to geographic, political, geopolitical and social change. We will examine what 'community' means; how it is influenced by external factors and internally by its members' interactions, shared expectations, values, beliefs and meanings. In addition. We will consider some key roles of the Project Manager throughout the lifecycle of a community project such as mobiliser, animator and activist.
3.2	**Project management principles and practice** – fundamental tools and approaches that underpin effective project management. Core concepts such as the 'iron triangle', project structuring, design, monitoring and control will be explored to determine essential elements of successful projects.
3.3	**People management principles and practice in the community project context** – we have both intrinsic and extrinsic desires, a good project manager understands these and making a community project happen often relies on skills such as persuasion, influencing, motivation and negotiation. We will also focus on the principles of community engagement from the best practice guidance in community development that includes conflict resolution, social psychology (how groups work) and consider what leads community groups to be functional or dysfunctional. This will also reinforce the learning in community theory as it is essential to accurately assess a community to engage effectively and sustainably.
3.4	**Dark art of funding** – making a successful funding application is a refined skill. We will examine examples of both successful and unsuccessful bids to determine what the critical

	elements are and talk to industry practitioners to hear how it is a perpetually evolving art, but one with fundamental rules and concepts that can be learnt.
3.5	**Putting it all together** – case studies will be examined throughout the course and assessments will give participants the opportunity to put into practice some of their newly developed knowledge and skills.

4. Approaches to Learning and Teaching

Notional Study Hours:

Typically, students will have to undertake about **150hrs** of study to successfully achieve the learning outcomes for this module; this will be made up of a combination of both scheduled and independent study as indicated below.

Scheduled Study: Typically consisting of:	**35 Hrs**
Lectures(webcast/pre-learning/interactive content)	20 hrs
Field work – community project work, research and interview	15 hrs
Independent Study (excluding practical field work above)	**115hrs**

5. Graduate Attributes

Opportunity to develop the following aspects of graduate attributes will be included within this module:

Graduate Attribute	**Learning Activity and Aspect Developed**
1. Academically competent	• Through investigative research students will be supported to develop a balanced approach when considering a variety of principles, concepts and methods.
2. Critical thinker	• Blended approaches will help participants develop critical skills and be able to collate, synthesise and analyse current issues facing communities and the environment.
3. Desire for learning and personal development	• Through field based learning (FBL) for assessment, students will undertake discussions with peers and industry experts to develop communication skills and enhance self-confidence. • Assessment activity will also encourage students to be independently driven learners who seek out ways of enhancing their understanding of community development through projects.
4. Responsible member of society	• By exploring how to deliver sustainable development, students will gain enhanced appreciation of how consultation and community involvement are key factors in successful planning and decision making.
5. Employability	• Through coursework students will become familiar with tools and techniques recognised both nationally and around the world for developing and delivering community projects. They will also be supported to develop interpersonal, analytical, problem solving and decision-making skills that are fundamental to projects with community interaction.

6. Assessment

This module will be assessed using the following methods:

Assessment Method	**Contribution to Grade (%)**	**Nature of Assessment**

Research inquiry	80%	2500 word report to evaluate community, community development techniques and project management mechanisms based on active engagement with an ongoing community project" (LO1,2,3)
Written work	20%	Complete a funding application for a small community-based environmental/conservation project (notionally 4-5 pages of funding forms). (LO4)

7. Reading

Required:

Brian D. Christens, (2019) Community power and empowerment [electronic book] New York, Oxford University Press

Phillips, Rhonda & Pittman, Ronald (2015), An Introduction to Community Development, 2nd Edition, Routledge

Project Management Basics [electronic book] : How to Manage Your Project with Checklists / by Melanie McBride McBride, Melanie. author. Berkeley, CA : Apress : Imprint: Apress, 2016.
Scottish Community Development Centre (2019) National Standards for Community Engagement, Website] https://www.scdc.org.uk/what/national-standards/

PMBOK GuidE – *Sixth Addition*. (2017). https://www.pmi.org/pmbok-guide-standards
Massey.S. (2011). Best Practices for Environmental Project Teams. Elsevier: Oxford

Additional:

Heritage Lottery Fund (2010) Thinking about…Community Participation [PDF] See moodle.
Scottish Education & Action for Development. (2000) Shifting the balance handbook: people power and participation. SEAD.
Making change [electronic book]: youth social entrepreneurship as an approach to positive youth and community development / Kruse, Tina (Tina P.), 1972- author. New York, NY : Oxford University Press, [2019]
Community Well-Being and Community Development [electronic resource] : Conceptions and Applications / edited by Seung Jong Lee, Yunji Kim, Rhonda Phillips Cham : Springer International Publishing : Imprint: Springer, 2015.
Key Project Management Based on Effective Project Thinking [electronic book] by Ronggui DING Berlin, Heidelberg : Springer Berlin Heidelberg : Imprint: Springer, 2016. 1st ed. 2016.
Karsten, A, (2012) Participation Models: Citizens, Youths, Online [PDF]
https://www.nonformality.org/wp-content/uploads/2012/11/Participation_Models_20121118.pdf

Dyson, J.R. (2007) Accounting for non-accounting students, 7th Edition, Prentice Hall.

National Council for Voluntary Organisations [Online] KnowHow [Accessed from: https://knowhow.ncvo.org.uk/]

Scottish Government (2009) Community: Scottish Community Empowerment Action Plan [PDF] – see moodle.
Volunteer Management Handbook (2012) https://www.dsc.org.uk/wp-content/uploads/2015/08/Look-Inside-Complete-Volunteer-Management-Handbook.pdf

Websites:
www.communityplanning.net
Scottish Community Development Network
http://www.scdn.scot/
Greenspace Scotland
www.greenspacescotland.org.uk

GIS and Remote Sensing	
Module Ref No:	
Date of Validation:	
SCQF Level:	**9**
SCQF Credits:	**15**

1. Rationale
Geographic Information System (GIS) and Remote Sensing (RS) technologies continue to develop rapidly and are increasingly regarded as standard 'professional tools' in many diverse sectors. Fundamental to their application is the ability of both GIS and RS data-sets to be placed in a unique geographic spatial context, thereby offering practitioners a very powerful and effective decision-making tool within project and/or business management. This module will serve to develop the understanding and practical skills required to allow students to become competent in the basic use and application of GIS and RS resource material. In addition to class practical and lecture sessions, the module will use case studies, demonstrations and/or visits to illustrate the widespread and versatile applications of GIS and RS systems currently in use. There is no expectation of prior knowledge of GIS, however the module is based on practice using industry-standard GIS software, so students should be confident in using complex software under written and practical guidance.

2. Learning Outcomes	
At the conclusion of this module the student should be able to:	
LO1:	For specified GIS applications, identify and evaluate possible sources of relevant information (including as appropriate field survey data, and RS data), and then integrate that information into a GIS project
LO2:	Through understanding set GIS-based problems, be able to develop the required workflow and use a range of GIS tools as appropriate for the problem being addressed
LO5:	Appraise the contribution of utilising a GIS-based approach for selected application(s)

3. Content	
3.1	**Resource requirements for specified GIS applications** Lecture and practical exercises. Digital and paper mapping, GIS softwares, Ordnance Survey and Internet mapping sources, vector and raster map types, map information, features and coordinate systems.
3.2	**Practical GIS functions and tasks** Demonstration of software, and practical exercises to be completed by students. Software tools and operation: skills may include (but not be limited to) importing and translating data, presentation, overlaying data, scale, manipulating layer properties, symbology, create own map data, field calculator, buffering, measurements, georeferencing, raster mosaics, viewshed analysis, contours, 3D imaging, display, present, print.
3.3	**Integrate field survey** Lecture/demonstration and local field trip. Operate handheld GPS units to locate and survey ground features. Extract GPS data to create thematic mapping. Other GPS equipment (e.g. DGPS, RTK) may be demonstrated if appropriate.
3.4	**Be aware of how to prepare, utilise and interpret RS data** Demonstration/lecture/practical exercise. Screen viewing and interpretation of aerial photography and Sentinel (or other) satellite imagery. Fundamental principles of Earth Observation techniques. Use of RS to monitor global change.

3.5	**Appraise the contribution of utilising a GIS-based approach for selected application(s)** Be able to critically examine the data used, mapping and analysis approach adopted for a specific task, and suggest additional approaches.

4. Approaches to Learning and Teaching

Notional Study Hours:

Typically, students will have to undertake about **150 hrs** of study to successfully achieve the learning outcomes for this module; this will be made up of a combination of both scheduled and independent study as indicated below.

Scheduled Study: Typically consisting of:	**36 hrs**
Lectures	3 hrs
Fieldwork/site visit	3 hrs
Practical classes or workshops	30 hrs
Independent Study:	**114 hrs**

5. Graduate Attributes

Opportunity to develop the following aspects of graduate attributes will be included within this module:

Graduate Attribute	**Learning Activity and Aspect Developed**
1. Academically competent	Through practice with different data types, development of a theoretical understanding of spatial data, along with a knowledge of how that data may be applied.
2. Critical thinker	Through critical consideration of problems. determine the data required for a specific task, critically evaluate the usefulness of data within an analysis.
3. Desire for learning and personal development	Through development of a basic understanding of GIS and RS possibilities, gain an appreciation of how such technology can be utilised in the students own discipline or area of interest.
4. Responsible member of society	
5. Employability	Through completion of this module, be able to offer employers a basic ability/awareness of GIS and RS technologies and application.

6. Assessment

The subject material does not lend itself to an end-of-year exam, and the unit should thus be assessed by 100% course work. This could be made up of a selection of the following (weightings and mix subject to discussion, and may be resource-dependant):

Assessment Method	**Contribution to Grade (%)**	**Nature of Assessment**
Report	70%	GIS-based practical exercise to produce an accompanying report (all LOs), with a recommend word count of 2 500 words.
Presentation or poster	30%	Preparation of an online poster or max 15 slide powerpoint or max 8 minute presentation of findings on a specified application of GIS/Remote Sensing (all LOs)

7. Reading

Some of these data sourses will be required, depending on the examples students address:

Due to the nature of this course, many websites (for accessing data, and/or finding information on specified techniques) will be of prime importance, such as:

http://www.esri.com/
https://www.youtube.com/channel/UCgGDPs8cte-VLJbgpaK4GPw
https://www.qgis.org/en/site/
http://www.edina.ac.uk/
http://digimap.blogs.edina.ac.uk/question/what-is-the-appropriate-wording-for-the-copyright-statement/
https://www.nature.scot/information-library-data-and-research/snhi-data-services
http://www.ordnancesurvey.co.uk/oswebsite/
https://statistics.gov.scot/home
http://ec.europa.eu/dgs/energy_transport/galileo/index_en.htm
https://scihub.copernicus.eu/
https://countrysidesurvey.org.uk/
http://corridordesign.org/designing_corridors/resources/gis_tools
https://www.ceh.ac.uk/data
http://www.bgs.ac.uk/opengeoscience/
https://www2.gov.scot/Topics/marine/science/MSInteractive
https://scotland.nbnatlas.org/
https://ckan.publishing.service.gov.uk/publisher/scottish-government-spatial-data-infrastructure
https://www.hutton.ac.uk/learning/exploringscotland/landcover-scotland-1988
https://www.eea.europa.eu/data-and-maps

Additional:

DURR, P &. GATRELL, A C. (2002)- GIS and spatial analysis in veterinary science Wallingford : CABI, 2002

MARSH, W M &. GROSSA, J(2001) Environmental geography : science, land use and earth systems /2nd ed Chichester : Wiley, 2001

BURROUGH. P.A AND MCDONNELL.R.A (2004-)Principles of Geographic Information Systems

- Oxford University Press

NEWTON, A (2007-) Forest ecology and Conservation- a handbook of techniques-Oxford University Press (chapters on Remote Sensing and GIS)

Scottish Forestry Vol 53 No 3 1999 pages149-162- articles relating use of GIS to Forestry- Royal Scottish Forestry Society

Enact Vol 8 No4 2000 p9-11 Using GPS to map trees.

Conservation Land Management Vol 1 No4 2003 p4-8- Use of GIS & GPS in conservation management.