

# **Diploma & MSc in Official Statistics Professional Development Programme**

## **STAT6088 Elements of Official Statistics: Course Outline**

### **Aims and Objectives**

The unit provides an overview of issues and ideas concerning the scope and organisation of Official Statistics, and its processes and products. The unit provides a general foundation for the more detailed study of these elements and identifies links with other relevant disciplines.

### **Learning Outcomes**

Students will have a broad overview of the fundamental issues underlying the organisation of Official Statistics and be able to apply this knowledge in discussing the relative merits of alternative approaches.

### **Course Outline**

#### **1. Overview:**

The importance of statistics in society

- Policy uses of Statistics
- Administrative uses of statistics

The need to command confidence and Trust

#### **2. History of the development of official statistics in the UK**

- Overview of key dates in the development of the UK statistical system

#### **3. The Legal and Administrative Framework**

- UN Fundamental Principles
- EU Law for Statistics
- Nature of National Statistics Acts – various countries
- The UK Statistic and Registration Service Act 2007
- UK Framework for National Statistics: Roles and responsibilities
- The advantages/ disadvantages of a UK statistics act

#### **4. Standards, Frameworks and Best Practice**

- International Standards
- The Code for Practice.
  - Content and intentions
  - Key Issues
- Scientific Principles

- International Framework
- National Statisticians Quality, Methods and Harmonisation guidance

## **5. Organisational Issues**

- Centralisation, decentralisation, devolution
- Management of NSIs

## **6. Professional Issues- ethics and professional bodies**

## **7. Current Developments**

- Dissemination
- Big Data

## **8. Public Trust in Official Statistics**

- Independence for Official Statistics
- Surveys on public trust in official statistics

## **9. Models for Quality**

- European Foundation for Quality Management (EFQM)
- International Standard Organisation (ISO)
- Balance Score Card
- EU Model

## **10. Measuring and reporting statistical Quality**

- Measuring output quality
- Reporting output quality
- Measuring process quality
- Assessment of metadata

## **STAT6088 Elements of Official; Statistics**

Location: University of Southampton  
Building 39, Room 3013 (Social Statistics Research Centre Seminar Room)

Co-ordinator: Marie Cruddas - ONS  
Presenters: Penny Babb - UK Statistics Authority  
Ria Sanderson/Jill Pobjoy - Quality Centre (ONS)  
Paul Smith – University of Southampton  
Invited speakers: Nigel Swier – Big Data Project (ONS)  
Alan Smith – Digital Content/ Data Visualisation ONS)  
Lindsay Prosser /Mandy Keen – Classifications (ONS)  
Emma Wright – Statistical Infrastructure (ONS)

Draft Timetable:

### **Monday April 27 2015**

10:30 Welcome and Coffee  
10:45 Introduction and Overview  
11:30 UK History of Official Statistics  
13:00 Lunch (1 hour)  
  
14:00 Statistical Legislation  
15:30 Coffee (20 minutes)  
15:50 Statistical Legislation (continued)  
16:30 Close

### **Tuesday April 28 2015**

10:00 Professional Practice: Code of Practice  
11:30 Coffee (20 minutes)  
11:50 Professional Practice: Assessment  
13:00 Lunch (1 hour)  
  
14:00 Quality  
15:00 Coffee (20 minutes)  
15:20 Quality (continued)  
16:30 Close

### **Wednesday April 29 2015**

10:00 Professional Practice: Professional bodies and Ethics  
11:30 Coffee (20 minutes)  
11:50 Professional Practice: Scientific Principles & International Context  
13:00 Lunch (1 Hour)  
  
14.00 International Standards  
15.00 Coffee (20 minutes)  
15.20 Professional Practice: EU Assessment  
16:30 Close

### **Thursday April 30 2015**

10:00	Organisational and Management Issues
11:30	Coffee (20 minutes)
11:50	Big Data
13:00	Lunch (1 Hour)
14:00	User Engagement / Dissemination
15:00	Coffee (20 minutes)
15:20	Public Trust in Official Statistics
16:00	Planning for examination, course evaluation
16:30	Close

### **Friday May 1 2015**

Room available all day for self study

### **STAT6088: Prerequisites / Essential reading**

There are no pre-requisites for this course.

The copies of the lecture slides are essential reading! A full bibliography will be provided along with copies of the required reading.

### **Draft Bibliography** [\* required reading]

Brackstone G J (1999) Managing Data Quality in a Statistical Agency. Survey Methodology.

Cabinet Office (2010), The Civil Service Code

\*Eurostat (2011), European Statistics Code of Practice for National and Community Statistics

\* Fellegi I P (1995) Characteristics of an Effective Statistical System, Morris Hansen Lecture, Washington

Handbook of Statistical Organisation, Third Edition: The Operation and Organisation of a Statistical Agency, UN 2003.

HMT (2006), Independence for Statistics: A Consultation Document, HMSO

Holt D (2003), The need for New Statistical Legislation for the UK, JRSS A, 166, 3, 349 - 367

\* Holt D (2008) Official Statistics, public policy and public trust, JRSS A, 171, 2, 323 - 346

House of Commons (2006), Independence for Statistics, House of Commons Paper

Number 1111, Treasury Committee's Tenth Report of Session 2005-06

House of Commons Library (2006), The Statistics and Registration Service Bill, Research Paper 06/66

House of Commons Public Administration Select Committee (2013) A review of the operation of the Statistics and Registration Service Act 2007, TSO

\* Laux, Richard, Alldritt, Richard, Dunnell Karen (2007), Evolution of the United Kingdom Statistical System, Statistical Journal of the IAOS 24, pp47 - 59, IOS Press

\* Mahon B (2009) Knowledge is Power: A Short History of Official Data Collection in the UK

ONS (2002), National Statistics Code of Practice, TSO

Nissel, M (1987). People Count, HMSO

RSS (1991) Official Statistics: Counting with Confidence, JRSS A, 154, 1

RSS Code of Conduct (1993)

\* Statistics and Registration Service Act 2007

Statistics Commission (2007) Proposals for a Code of Practice for Official Statistics, Report number 35

Statistics Commission (2004) Legislation to Build Trust in National Statistics, Report number 18

United Kingdom Statistics Authority (2009) Code of Practice for Official Statistics Report on the Consultation and the Principles and Procedures for assessment, Report 2

United Nations Statistics Division (2014), Fundamental Principles of Official Statistics, United Nations

Ward, Reg and Doggett, Ted (1991) Keeping Score The First Fifty Years of the Central Statistical Office, HSO

## **STAT6088 Elements of Official Statistics**

### **2015 Examination**

Examination 120 minutes

Part A: 60%

Choose one question from three.

Part B 40%

Choose one question from three.

Students may bring in one A4 side of preparatory notes into the exam room relating to section A. This must be submitted with the answer book.

Outline of topics for Part A will be provided during the course.

### **Contact details for tutor**

<b>Tutor</b>	<b>Telephone number</b>	<b>e-mail address</b>
Marie Cruddas	01329 444177	marie.cruddas@ons.gov.uk

Dr Marie Cruddas

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