Birkbeck
University of London
Department of Computer Science and Information Systems

MSc
Advanced Information Systems

Programme Handbook
2011/2012

Contents

Overview of the Programme

Programme Director:	Nigel Martin (nigel@dcs.bbk.ac.uk)
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The MSc in Advanced Information Systems is a specialised programme of study focusing on the following areas:

- Information management
- Information systems development
- Advanced computing techniques

Students who complete this MSc will have gained strong practical and theoretical knowledge of the above areas which they will be able to use in

- analysis of problems arising in information management and information systems development
- evaluation of technology options
- deployment of appropriate solutions
- research into, and development of, new technologies.

Full-time students follow 8 taught modules and undertake a 3-4 month project. Part-time students are normally expected to take 4 taught modules in each of the two years and the project component in the second year

Students select their modules from the following:

- Advances in Data Management (ADM)
- Component-Based Software Development (CBSD)
- Computational Intelligence (CI)
- Data Warehousing and Data Mining (DWDM)
- Image-Based Information Processing (IBIP)
- Information Retrieval and Organisation (IR)
- Intelligent Technologies (IT)
- Internet and Web Technologies (IWT)
- Knowledge Representation and Reasoning (KRR)
- Mobile and Ubiquitous Computing (MUC)
- Object-oriented Design and Programming (OODP)
- Search Engines and Web Navigation (SEWN)
- Semantic Web (SW)

If you are not a proficient Java programmer or not familiar enough with Object-Oriented design principles, you are strongly advised to follow the course “An Introduction to Object-Oriented Programming”. This is delivered online with video lectures and can be accessed through the following link: http://www.dcs.bbk.ac.uk/~keith/oopintro

The information in this Handbook is specific to the MSc in Advanced Information Systems. More detailed information about aspects of the programme is available on the intranet at http://vili.dcs.bbk.ac.uk/intranet/r/courses/ais/ . Important notices are posted throughout the year on an electronic whiteboard accessible from the above page. Some of the modules use a Virtual Learning Environment called Blackboard (www.ble.ac.uk).

It is your responsibility to familiarise yourself with the contents of this Handbook as well as the web site, and Blackboard, and to consult the web site on a regular basis since additional information will be posted there during the year. You should also read your Departmental and College email on a daily basis.

Dates and Timetables

The term dates for the academic year 2011/12 are as follows:

Autumn	3 October 2011 – 16 December 2011
Spring	9 January 2012 – 23 March 2012
Summer	23 April 2011 – 6 July 2011

Introductory talks for students will be held at the following times:

Full-time students	6pm, Tuesday 27 September
Part-time students, year 1	6pm, Tuesday 27 September
Part-time students, year 2	6pm, Thursday 29 September

First lectures for modules are as follows:

Full-time students	6pm, Monday 3 October
Part-time students, year 1	6pm, Monday 3 October
Part-time students, year 2	6pm, Monday 3 October

The taught programme covers two terms of approximately eleven weeks each. The summer term is devoted to exams and the project (for full-time students and part-time, year 2 students). Note that the project is handed in only in September.

You will be notified nearer the time of the room in which the introductory talks will take place. For new students, these will include a short hands-on introduction to the Department's computer system. If you are not able to attend the introductory talk, please arrive early for the first lecture and speak to the Programme Administrator in Room 263 on the second floor of the extension to the Birkbeck main building.

College holiday closing

- *Christmas and New Year Closure:* closing on Thursday 22 December 2011 at 5pm; re-opening on Tuesday 3 January 2012 at 9am.
- *Easter closure:* closing on Wednesday 4 April 2012 at 6pm; re-opening on Tuesday 10 April 2012 at 9am.
- *May Day Bank Holiday*: closed on 7 May 2012.
- *Spring Bank Holiday and Queen's Diamond Jubilee:* closed on 4 and 5 June 2012.

Lecture timetables

Module abbreviations used in the following timetables are given in the section Overview of the Programme above.

Room locations are shown on the map at:
http://www.bbk.ac.uk/mybirkbeck/guides/help/class-information/teaching-map.pdf

Rooms with prefix MAL are located in the main Birkbeck building in Malet Street (1 on map).

Rooms with prefix RUS are located in the Birkbeck building at 28 Russell Square (4 on map).

Rooms with prefix VER are located in the SOAS building at Vernon Square close to Kings Cross tube (22 on map). For those wishing to walk from Birkbeck rather than use Kings Cross tube, a suggested walking route is shown on:
http://www.soas.ac.uk/visitors/location/maps/

Full-time lecture timetable 2011/12

Day	Autumn			Spring		
	Module	Time	Room	Module	Time	Room
Monday	SW	6-9pm	MAL 321	DWDM KRR	2-5pm 6-9pm	
Tuesday	ADM	2-5pm	MAL 404	CI IBIP	2-5pm 6-9pm	
Wednesday	IWT	6-9pm	MAL 404/5	MUC CBSD	2-5pm 6-9pm	
Thursday	IT SEWN	2-5pm 6-9pm	MAL 407 MAL 403	OODP	6-9pm	
Friday				IR	6-9pm	

Part-time lecture timetables are given for both 2011/12 and 2012/13. The reason for this is that some modules are offered in the evening on alternate years only. ***Therefore students must select 4 modules each year in such a way as to ensure that they can complete their chosen 8 modules in 2 years.***

Part-time lecture timetable 2011/12

Day	Autumn			Spring		
	Module	Time	Room	Module	Time	Room
Monday	SW	6-9pm	MAL 321	KRR	6-9pm	
Tuesday				IBIP	6-9pm	
Wednesday	IWT	6-9pm	MAL 404/5	CBSD	6-9pm	
Thursday	SEWN	6-9pm	MAL 403	OODP	6-9pm	
Friday				IR	6-9pm	

Part-time students in their first year of study wishing to take SW or SEWN must do so in the autumn term. If they wish to take any of KRR, IBIP or CBSD, these must be taken in the spring term. None of these 5 modules will be offered in the evening in the following year (see below an indicative timetable for 2012/13. It is expected that 2011/12 will be the last year in which IBIP is offered.

Indicative part-time lecture timetable 2012/13						
Day	**Autumn**			**Spring**		
	Module	Time	Room	Module	Time	Room
Monday				DWDM	6-9pm	
Tuesday	ADM	6-9pm		CI	6-9pm	
Wednesday	IWT	6-9pm		MUC	6-9pm	
Thursday	IT	6-9pm		OODP	6-9pm	
Friday				IR	6-9pm	

Student Support

Every student is allocated a **personal tutor** in the first weeks of the programme. The personal tutor is someone students can contact to discuss any problems of a non-academic nature. These may relate to special needs or personal problems that may affect the student's academic performance. The Department also has a disability officer, Jenny Pedler, whom students can contact.

Academic problems should first be addressed to the lecturer concerned. If the problem is not resolved or it does not relate to a specific module, then the Programme Director should be contacted. Details of the College's "Student Dispute Resolution Procedure" is linked from the My Birkbeck webpages at http://www.bbk.ac.uk/mybirkbeck/aig.

Students on each programme elect **Class Representatives** from amongst themselves early in the academic year. Class Reps provide a point of contact with the Department for student feedback on modules and other aspects of the programme. They can make the Department aware of students' views both in respect of any problems students are experiencing as well as positive points they want to make.

While Class Reps can raise matters with the Programme Director at any time, they also attend **Staff-Student Exchange meetings** in each of the autumn and spring terms at which students' views on any aspect of the Programme can be raised with the Programme Director. These meetings are minuted and the minutes made available on the Department intranet. Students should make sure that their Class Reps are aware of any matters which they wish to be raised at these meetings.

The **Birkbeck Students' Union** provides help and advice to students – information about their services can be found linked from the Students' Union webpage: http://www.bbk.ac.uk/su/

Financial support advice is provided by the **Student Financial Support Office** (tel: 020 7631 6362), 12-5.30pm Monday to Thursday. At Birkbeck, we believe that lack of finances should not be a barrier to you studying so we provide financial support packages and bursaries. Information on financial support is available online at: http://www.bbk.ac.uk/mybirkbeck/finance/studentfinance

Module Descriptions

Lectures aim to introduce the key ideas of each module. The specific objectives of each module and the principal readings are circulated at the start of the term. The reading lists for individual modules given below are only indicative. Lecturers will specify, usually at the first lecture, whether or not books need to be purchased for particular modules. Independent study is a key learning objective of the programme.

Most modules have dedicated web pages that provide links to relevant online literature. Depending on the nature of the material, some lecturers use 'lecture outlines' to support their teaching and may even distribute these outlines via their web pages. However, there is no expectation that written notes will be provided for the modules.

Students can also contact lecturers outside the classroom to discuss the material. They can meet the lecturers during scheduled 'office hours' or can contact them via email either to discuss a problem or to make an appointment. Lecturers' contact details are given on the Department web site and in the Department's Student Handbook.

Students are expected to attend all lectures. Any student who decides to withdraw from the programme should inform the Programme Director, in writing or by email. Students who simply stop turning up for lectures without formally withdrawing from the programme will still be held liable for fees.

A number of modules require students to submit coursework as part of the assessment. Such coursework must always be the students' own work, except where explicitly noted. Students are required to confirm in writing or via email that each item of coursework submitted is indeed their own work. The Department and College have strict guidelines and penalties associated with plagiarism, and routinely submit students' work to plagiarism detection services. More details are given in the section Plagiarism of this Handbook.

Advances in Data Management (ADM)

Aims of the Module

To study advanced aspects of database management and recent advances in data management technologies in three major directions: performance, distribution of data and heterogeneity of data.

The module examines the technologies underlying modern database management systems (DBMS). It studies advanced aspects of data management, including query processing, transaction management, distributed databases, and recent developments in heterogeneous data integration and XML data management.

Staff: Alex Poulovassilis and Sven Helmer

Assessment: By 2-hour written examination and practical coursework. The final module mark will be the exam mark attained. A minimum mark of 40% on the practical coursework component will be necessary in order to pass the module overall.

Module URL: http://www.dcs.bbk.ac.uk/~ap/teaching

Pre-requisites and co-requisites to the module

Prerequisites: A first module in Database Systems (e.g. as taught in a typical UK undergraduate degree in computer science)

Syllabus

- Review of the fundamental principles of modern database management systems: architecture and functionality; relational databases (the relational data model, the relational algebra, SQL).
- Query processing and query optimisation.
- Transaction management: ACID properties, concurrency control, recovery.
- Beyond records and objects: stored procedures and functions, triggers and active databases.
- Distributed databases: architecture, distributed query processing, distributed transaction management.
- Heterogeneous data integration: architecture, schema translation and schema integration, query processing, transaction management, alternative transaction models.
- XML data management.
- Web data management.

Background Reading

1. R. Ramakrishnan and J.Gehrke, *Database Management Systems*, McGraw-Hill 2003 (3rd Edition)
2. M. T. Oszu, P. Valduriez, Principles *of Distributed Database Systems*, Prentice-Hall 1999 (2nd Edition)
3. A. Elmagarmid, M. Rusinkiewicz, A. Sheth (eds), *Management of Heterogeneous and Autonomous Database Systems*, Morgan Kaufmann, 1999
4. Research papers will be distributed to students; students will also be directed to Web resources on the subject.

Component-Based Software Development (CBSD)

Aims of the Module

Component-based development is a new trend within industry, office automation, web-based application, etc. This module provides a detailed study of the concepts and engineering principles of software component and component-based software systems. These modular technologies underpin the construction of centralized and distributed applications and middleware. We review current technologies and standards and build on the students' previous knowledge of object-oriented programming. The emerging standards and architectures in the "Cloud Computing" arena are also described in this module (e.g., PaaS, IaaS, and SaaS).

The module has a practical bias (how to build things) and utilises hands-on exercises and coursework to give practical experience of constructing component-based software systems. After the module, students should understand the principles in building large-scale component-based software systems.

Staff: Keith Mannock

Assessment: By 2-hour written examination and practical coursework. The written examination has a weighting of 75% and the coursework has a weighting of 25% of the final mark.

Module URL: http://www.dcs.bbk.ac.uk/~keith/cbsd

Pre-requisites and co-requisites to the module

No formal pre-requisite or co-requisite module, but a working knowledge of an object-oriented programming language (e.g., Java) is essential.

Syllabus

- Introduction and overview
- Java and CBSD
- Distributed computing and n-tier architectures
- Common component technologies, e.g., CORBA, .NET, JEE, OSGi, etc.
- Introduction to EJBs
    - RPC, RMI, IIOP etc.
    - Session Beans, Entity Beans, Message Driven Beans
    - Deployment and Testing
- Enterprise Design Patterns
- Dependency Injection frameworks (e.g., Spring, Google Guice)
- Introduction to Web Services (i.e., SOAP, WSDL, UDDI)
- Service Oriented Architectures and Cloud Computing (including Software-as-a-Service, Platform-as-a-Service, Infrastructure-as-a-Service)
- Application interoperability between component architectures

Indicative Reading

1. G. A. Lewis, I. Poernomo, C. Hofmeister (eds) *Component-Based Software Engineering*, Lecture Notes in Computer Science / Programming and Software Engineering, Springer, 2009, ISBN 3642024130
2. G. T. Heineman, W. T. Councill, *Component-Based Software Engineering* by; Addison Wesley, 2008, ISBN 076868207X
3. Spring Framework Tutorial (http://java9s.com/spring-framework-tutorial)
4. Java Enterprise Edition Tutorial (http://download.oracle.com/javaee/6/tutorial/doc)

Computational Intelligence (CI)

Aims of the Module

The module covers advanced computational methods for intelligent data-driven modelling, knowledge representation, decision making and complex problem solving.

Staff: George Magoulas

Assessment: 2-hour written examination and practical coursework, weighting 80% and 20% respectively.

Module URL: The module uses the Blackboard Virtual Learning Environment; log on at www.ble.ac.uk (ITS user name and password are required).

Pre-requisites and co-requisites to the module

Knowledge of mathematical foundations (algebra, vectors, matrices, functions and graphs, gradients, trigonometry, statistics and probability), and data structures and algorithms, as taught in a typical undergraduate degree in computer science or engineering, is essential.

Syllabus

- Neural Network Architectures
- Learning Algorithms
- Fuzzy and Neurofuzzy Systems
- Particle Swarms
- Differential Evolution
- Computational Intelligence Applications.

Background Reading

1. R. Rojas (1996), *Neural Networks-A Systematic Introduction*. Available online at: http://page.mi.fu-berlin.de/rojas/neural/
2. K. V. Price, R. M. Storn, J. A. Lampinen 92005), *Differential Evolution: A Practical Approach to Global Optimization*. Available online at: http://tinyurl.com/388dh9q
3. A. Lazinica (2009), *Particle Swarm Optimization*. Available online at: http://intechweb.org/book.php?id=155
4. J-S. R. Jang, C-T. Sun and E. Mizutani (1997), *Neuro-Fuzzy and Soft Computing: A Computational Approach to Learning and Machine Intelligence*. Available online at: http://tinyurl.com/3y2m28e

Data Warehousing and Data Mining (DWDM)

Aims of the Module

To study advanced aspects of data warehousing and data mining, encompassing the principles, research results and commercial application of the technologies.

Staff: Nigel Martin

Assessment: By 2-hour written examination and practical coursework. The final module mark will be the exam mark attained. A minimum mark of 40% on the practical coursework component will be necessary in order to pass the module overall.

Module URL: http://www.dcs.bbk.ac.uk/~nigel/teaching/dwdm/

Pre-requisites and co-requisites to the module

Prerequisites: A first module in Database Systems (e.g. as taught in a typical UK undergraduate degree in computer science)

Syllabus

- Review of database technology underpinning data warehousing and data mining.
- Data warehouse logical design: star schemas, fact tables, dimensions, snowflake schemas, dimension hierarchies, data marts.
- Data warehouse physical design: partitioning, parallelism, compression, indexes, materialized views, column stores.
- Data warehouse construction: data extraction, transformation, loading and refreshing. Data warehouse support in Oracle. Warehouse metadata. Specialised warehouse architectures.
- From data warehousing to data mining: OLAP architectures, OLAP operations. SQL extensions for OLAP.
- Data mining approaches and applications. Data mining technologies and implementations. Techniques for mining large databases.
- Data mining support in commercial systems. Data mining standards.
- Research trends in data warehousing and data mining.

Reading

1. R. Ramakrishnan, J. Gehrke, *Database Management Systems* (3rd ed.), McGraw Hill, 2003, ISBN 0-07-246563-8.
2. M. Golfarelli, S. Rizzi, *Data Warehouse Design: Modern Principles and Methodologies*, McGraw Hill, 2009, ISBN 978-0-07-161039-1
3. J. Han, M. Kamber, *Data Mining Concepts and Techniques (3rd ed.)*, Morgan Kaufmann, 2011, ISBN 978-0-12-381479-1.

Image-Based Information Processing (IBIP)

Aims of the Module

To cover a wide range of methods in computer vision and to give practical experience in implementing computer vision algorithms in laboratory classes and through project work. The computer vision methods include image smoothing, linear filtering, the extraction of image points and matching between images, colour images, image compression, geometry of image formation and stereo.

Staff: Steve Maybank and Dell Zhang

Assessment: By 2-hour written examination and by coursework. The written examination will have a weighting of 80% and the coursework a weighting of 20% of the final mark.

Module URL: http://www.dcs.bbk.ac.uk/~sjmaybank/ibip.html

Pre-requisites and co-requisites to the module

Pre-requisites: a first course in mathematical foundations, programming and algorithms (e.g. as taught in a typical UK undergraduate degree in computer science).

Syllabus

- Digital images and digital geometry
- Linear filtering including smoothing and edge detection
- Detection of points and edges in images
- Image registration
- Pinhole camera and stereo
- Discrete cosine transform
- Image processing in Matlab
- Texture analysis, classification and synthesis
- Image coding and compression, JPEG, GIF
- Video coding and compression, MPEG 1, MPEG 2, MPEG 4, H.26
- Multimedia content description interface, MPEG-7
- Colour images and colour spaces
- Biometrics, e.g. face, fingerprint, iris and gait recognition

Reading

1. D.A. Forsyth and J. Ponce, *Computer Vision, a modern approach*. Prentice Hall, 2003.
2. R.C. Gonzalez and R.E. Woods, *Digital Image Processing*. Second Edition, Prentice Hall, 2002.

Information Retrieval and Organisation (IR)

Aims of the Module

Due to the explosive growth of digital information in recent years, modern Information Retrieval (IR) systems such as search engines have become more and more important in almost everyone's work and life (e.g. see the phenomenal rise of Google). IR research and development are one of the hottest research areas in academia as well as industry. The aim of this module is to introduce modern IR concepts and techniques, from basic text indexing to advanced text mining. Both theoretical and practical aspects of IR systems will be presented and the most recent issues in the field of IR will be discussed. This will give students an insight into how modern search engines work and are developed.

Staff: Sven Helmer and Dell Zhang

Assessment: By 2-hour written examination and practical coursework, weighting 80% and 20% respectively.

Module URL: http://www.dcs.bbk.ac.uk/~sven/ir/
http://www.dcs.bbk.ac.uk/~dell/teaching/ir/

Pre-requisites and co-requisites to the module

None.

Syllabus

- Boolean Retrieval
- The Term Vocabulary & Postings Lists
- Dictionaries & Tolerant Retrieval
- Index Construction and Compression
- Scoring, Term Weighting & the Vector Space Model
- Computing Scores in A Complete Search System
- Evaluation in Information Retrieval, Relevance Feedback & Query Expansion
- Probabilistic Information Retrieval
- Language Models for Information Retrieval
- Text Classification, Naive Bayes and Vector Space Classification
- Flat and Hierarchical Clustering
- Advanced Topics in IR

Reading

C. D. Manning, P. Raghavan and H. Schutze, *Introduction to Information Retrieval*, Cambridge University Press, 2008, ISBN 0521865719. Online edition available at: http://www-csli.stanford.edu/~hinrich/information-retrieval-book.html .

Intelligent Technologies (IT)

Aims of the Module

The module covers alternative methods for intelligent data-driven modelling, information management, decision making and complex problem solving so that students gain a valid image of intelligent computing paradigms and of systems that employ intelligent components. It provides an introduction to technologies such as artificial neural networks, fuzzy systems, hybrid systems (e.g. neuro-fuzzy, neuroevolution), ontologies and reasoning services, and service oriented-architectures showing how such technologies work together to support the development of modern intelligent applications. The module explains the fundamental aspects, illustrates what technologies are useful for and how to choose the right technology for an application, and how systems that employ these technologies are designed and built.

Staff: George Magoulas

Assessment: By 2-hour written examination.

Module URL: The module uses the Blackboard Virtual Learning Environment; log on at www.ble.ac.uk (ITS user name and password are required).

Pre-requisites and co-requisites to the module

No formal pre-requisite or co-requisite module but basic knowledge of GCSE level maths (http://www.gcseguide.co.uk/mathsgcseguide.htm) is essential.

Syllabus

- Expert systems
- Fuzzy logic and fuzzy systems
- Introduction to clustering
- Neural network-based knowledge representation and inference
- Hybrid Approaches
- Data modelling, metadata standards and repositories
- Ontologies and reasoning services
- Intelligent systems architecture

Reading

1. A.P. Engelbrecht, *Computational Intelligence: An Introduction*, John Wiley & Sons, 2002; ISBN: 0470848707.
2. M. Negnevitsky, *Artificial Intelligence: a Guide to Intelligent Systems*, second edition, Addison Wesley, 2004.

Research papers which will be distributed to the students; students will also be directed to Web resources on the subject.

Internet and Web Technologies (IWT)

Aims of the Module

To provide students with an understanding of how network protocols work, particularly those used on the Internet, and the ability to present and manipulate information on the World Wide Web, with an emphasis on XML.

Staff: Peter Wood

Assessment: By 2-hour written examination and by practical coursework. The written examination will have a weighting of 80% and the coursework a weighting of 20% of the final mark.

Module URL: http://www.dcs.bbk.ac.uk/~ptw/teaching/IWT.html

Pre-requisites and co-requisites to the module

The ability to program is essential. This need not be in an object-oriented language, although that ability would be helpful. Some basic knowledge of HTML and databases, in particular the relational model and SQL, is assumed; if this is lacking, however, it can be obtained through self-study of on-line resources.

Syllabus

- Introduction to the Internet and its applications
- Data communication concepts
- Packet switching and network technologies
- Internetworking
- Web languages
- Languages for defining Web document types
- Web query and transformation languages
- Client-side processing
- Server-side processing

Reading

1. S. Jacobs, *Beginning XML with DOM and AJAX*. Apress, 2006, ISBN 1-59059-676-5.
2. A. Moller and M. Schwartzbach, *An Introduction to XML and Web Technologies.* Addison Wesley, 2006, ISBN 0-321-26966-7.
3. D. E. Comer, *Computer Networks and Internets* (5th Edition), Pearson, 2009, ISBN 0-13-504583-5.

Knowledge Representation and Reasoning (KRR)

Aims of the Module
In this module we will concentrate on logics that are applied in various branches of computer science, including distributed systems (reasoning about knowledge), artificial intelligence (knowledge representation) and software engineering (specification and verification). After a gentle introduction to the basics of propositional, modal and temporal logics (with an emphasis on semantics) students will learn how logic can be used as a formal tool in computer science: applications range from multi-agent systems and the world wide web to code verification.

Staff: Szabolcs Mikulas

Assessment: By 2-hour written examination.

Module URL: http://www.dcs.bbk.ac.uk/~szabolcs/log.html

Pre-requisites and co-requisites to the module
Familiarity with the basics of formal reasoning and algorithms (e.g. as taught in a typical UK undergraduate degree in computer science)

Syllabus

Logical formalisms: basic properties (syntax and semantics) and concepts (truth, consequence) of

- Propositional logic,
- Modal and epistemic logic,
- Temporal logic,
- Description logic.

Applications (the following list contains some application areas that we may look at during the module depending on students' interests):

- Reasoning about knowledge: modelling knowledge in multi-agent systems (including common and distributed knowledge, agreement), describing the behaviour of a system by using the knowledge of the participating agents,
- Knowledge representation: knowledge bases, reasoning about knowledge (consistency checking, deriving knowledge),
- Programme verification: transition systems and computations, verification of concurrent programs.

Reading

1. M. Huth and M. Ryan, *Logic in Computer Science*, second edition, Cambridge University Press, 2004.
2. Further readings including lecture notes will be distributed/recommended.

Mobile and Ubiquitous Computing (MUC)

Aims of the Module

Students taking this module will:

- study the novel aspects of mobile, ubiquitous and pervasive computing systems
- study the principles, research problems and applications of sensor networks
- acquire a range of design skills for software development in mobile and ubiquitous computing
- acquire systems development experience with mobile and ubiquitous computing technologies
- help students develop self-study skills so that they can keep up with the rapidly changing technologies, tools and techniques in the area

Staff: George Roussos

Assessment: By 2-hour written examination and by practical project. The written examination will have a weighting of 80% and the project a weighting of 20% of the final mark.

Module URL: http://www.dcs.bbk.ac.uk/~gr/muc/

Pre-requisites and co-requisites to the module

Prerequisites: a first course in networks and a first course in software engineering (e.g. as taught in a typical UK undergraduate degree in computer science). Experience in Java programming (as provided by the ISD module).

Syllabus

- Mobile networking
- Types of mobile networks
- Mobile network architectures
- Cellular telephony
- Mobile ad-hoc networks
- Routing and mobile IP
- Location based services
- Physical-electronic integration
- Augmenting physical artefacts
- Radio frequency identification
- Tangible interfaces and interactive displays
- Sensor and actuator networks
- Platforms and capabilities
- Programming sensor networks
- Programming with J2ME

Reading

1. J. Schiller, *Mobile Communications*, Addison Wesley, 2003.
2. G. Roussos, *Networked RFID: Systems, Software and Services*, Springer, 2008.
3. L. Harte and B. Levitan, *GPS Quick Course Technology, Systems and Operation*, Althos, 2007.

Object-oriented Design and Programming (OODP)

Aims of the Module

The main aim of the module is to provide students with the necessary skills for developing software in an object-oriented way according to high quality standards. This ranges from learning object-oriented concepts, designing object-oriented software using a proven methodology (such as the Unified Process), to learning how to program in an object-oriented way.

Staff: Oded Lachish

Assessment: By 2-hour written examination and practical coursework; weighting 80% and 20% respectively.

Module URL: The module will use the Blackboard Virtual Learning Environment; log on at www.ble.ac.uk (ITS user name and password are required).

Pre-requisites and co-requisites to the module

A working knowledge of a modern programming language is essential.

Syllabus

- Introduction to object-oriented concepts and the Unified Process
- Overview of object-oriented analysis and design using UML 2.0
- Design patterns
- Designing objects and their interactions
- Data model and implementation model
- Object-oriented language implementation
- Type systems and generics

Reading

1. C. Larman, *Applying UML and Patterns: An Introduction to Object-Oriented Analysis and Design and the Unified Process*, 3rd edition, Prentice-Hall 2002
2. E. Gamma, R. Helm, R. Johnson, J. Vlissides, *Design Patterns: Elements of Reusable Object-Oriented Software*, Addison Wesley, 1995.
3. R. S. Pressman, *Software Engineering: A practitioner's approach*, Fifth Edition 2001, Chapters 11, 20-23
4. D. J. Eck, *An Introduction to Programming Using Java*, Fifth Edition, , 2007, math.hws.edu/javanotes

Search Engines and Web Navigation (SEWN)

Aims of the Module

To familiarize the student with the main technologies that underpin the World Wide Web (WWW), with an emphasis on search engines and web navigation, which provide us with a variety of tools that assist us in finding our way around the web. The module has three main strands: (i) technical foundations, (ii) core technologies and (iii) emerging technologies. An important aim of the module is to enable the student to experiment with the various tools and to understand the convergence of these technologies within the WWW.

Staff: Mark Levene

Assessment: By 2-hour written examination and weekly practical coursework. The written examination will have a weighting of 80% and the coursework a weighting of 20% of the final mark.

Module URL: http://www.dcs.bbk.ac.uk/~mark/webtech.html

Pre-requisites and co-requisites to the module

None

Syllabus

- How the WWW operates - some history and terminology
- The structure of the web
- Link analysis on the web
- Searching the web
- Navigating the web
- Web usage mining
- Recommender systems and collaborative filtering
- The mobile web

Reading

M. Levene *An Introduction to Search Engines and Web Navigation,* Pearson Education, 2005, ISBN 0321306775.

Semantic Web (SW)

Aims of the Module

To introduce the theoretical foundations of the Semantic Web, which brings semantics to the (syntactic) Internet, and to provide students both with theoretical and practical skills of building ontologies.

Staff: Michael Zakharyaschev

Assessment: By 2-hour written examination and by practical coursework. The written examination will have a weighting of 80% and the coursework a weighting of 20% of the final mark.

Module URL: http://www.dcs.bbk.ac.uk/~michael/sw/sw.html

Pre-requisites and co-requisites to the module

None

Syllabus

- The history of the Semantic Web. Syntactic vs semantic web. Ontologies in (Computer) Science.
- The layered approach to the Semantic Web. XML, the tree model of XML documents, XML Schema. Querying XML documents, XPath.
- RDF (Resource Description Framework). RDF Schema. RDF/S semantics.
- Requirements for ontology languages. From RDFS to OWL. Three species of OWL. OWL ontologies.
- Ontology engineering.
- Reasoning with OWL. Open vs closed worlds. Constructors.
- Description logics.
- Reasoning with description logics. Tableau algorithms.
- OWL as a description logic.
- Lab sessions: OWL and the Protege/OWL tools.

Reading

1. Grigoris Antoniou and Frank van Harmelen. *A Semantic Web Primer*. MIT Press, 2004. ISBN 0-262-01210-3
2. Pascal Hitzler, Markus Kroetzsch and Sebastian Rudolph. *Foundations of Semantic Web Technologies*. Chapman & Hall, 2009. ISBN 978-1420090505
3. Dean Allemang and Jim Hendler. *Semantic Web for the Working Ontologist*. Morgan Kaufmann, 2008. ISBN 978-0123735560

Module Evaluation

As part of our quality assurance process, we ask students to anonymously evaluate programmes each term by competing module questionnaires. Students' feedback helps us to further develop the course and the individual modules.

Typically, questionnaires include two parts. In the first part students are asked to rate several aspects of the modules, while in the second part to answer some open ended questions. An example questionnaire is presented below.

Course Unit Questionnaire

Module Title: XXXXX
Module Code : XXXXX
Unit/Module Organiser and Session:, XXXXX, 2010

Birkbeck
UNIVERSITY OF LONDON

This questionnaire is part of our continuing effort at Birkbeck to improve courses and teaching, and to promote learning. We value your *anonymous* completion of this form. We will take into account your feedback in the further development of this course unit/module, and we will report to you on any action taken.

Please answer all the questions that apply to you by ticking the category which best reflects your view. Overleaf there is space for you to provide feedback in your own words. Return your completed questionnaire to the Programme Administrator (Thomas Epineau) in Room 263.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
1. The workload was appropriate.	☐5	☐4	☐3	☐2	☐1	☐
2. The unit was well organised.	☐5	☐4	☐3	☐2	☐1	☐
3. The objectives of the unit were made clear.	☐5	☐4	☐3	☐2	☐1	☐
4. The unit has enabled me to meet its stated objectives.	☐5	☐4	☐3	☐2	☐1	☐
5. The pacing of the unit was good.	☐5	☐4	☐3	☐2	☐1	☐
6. The information provided on this unit (reading list, unit outline, handouts, etc.) was useful.	☐5	☐4	☐3	☐2	☐1	☐
7. The computing facilities I needed for this unit were satisfactory.	☐5	☐4	☐3	☐2	☐1	☐
8. The teaching rooms for this unit were fit for their purpose.	☐5	☐4	☐3	☐2	☐1	☐
9. The unit helped me to think critically.	☐5	☐4	☐3	☐2	☐1	☐
10. I have learnt skills that I could apply elsewhere.	☐5	☐4	☐3	☐2	☐1	☐
11. The unit was intellectually challenging.	☐5	☐4	☐3	☐2	☐1	☐
12. The unit has given me a good understanding of the subject.	☐5	☐4	☐3	☐2	☐1	☐
13. The unit has developed my interest in the subject.	☐5	☐4	☐3	☐2	☐1	☐
14. The unit has covered appropriate topics.	☐5	☐4	☐3	☐2	☐1	☐
15. The subject content of the unit was at a suitable level.	☐5	☐4	☐3	☐2	☐1	☐
16. The method(s) of assessment were appropriate to the objectives of this unit.	☐5	☐4	☐3	☐2	☐1	☐
17. Overall, I am very satisfied with this learning experience.	☐5	☐4	☐3	☐2	☐1	☐
18.	☐5	☐4	☐3	☐2	☐1	☐
29.	☐5	☐4	☐3	☐2	☐1	☐
20.	☐5	☐4	☐3	☐2	☐1	☐
21.	☐5	☐4	☐3	☐2	☐1	☐

Open-ended comments

What did you like about this unit/module?

How could this unit/module be improved?

Please use this space for any further comments you would like to make about the unit/module.

Thank you for taking the time to complete this questionnaire.

Project Guidelines

Each student is required to undertake an individual project, under the supervision of a staff member, which should represent some 25-30% of the student's effort for the degree (60 credits). Students are expected to come up with their own ideas for projects in consultation with a lecturer or choose one of the projects proposed by staff - a list of some ideas for projects can be found at:

http://www.dcs.bbk.ac.uk/intranet/r/doc/staff-interests.html

Both cases are subject to the constraint that the project relates to one or more modules on the MSc programme.

In order to arrange supervision for a project, a student should discuss possible projects directly with the lecturer who seems the most appropriate for the topic; lecturers' research interests are listed below and more details can be found on their personal webpages. However, do not feel you can only approach a lecturer with research interests directly related to the area you would like to pursue in your project. It can happen that a lecturer will be interested in discussing a possible project which, while not very directly related to their main research interests, nonetheless has an aspect of particular interest to that lecturer. If you feel uncertain about identifying a suitable supervisor for your project contact the Programme Director.

Projects are examined on only one occasion each year; the deadline for submission of project reports is **Monday 17 September 2012**. **Two hard copies of the project report should be submitted to the Programme Administrator by the deadline, and one electronic copy uploaded on the Virtual Learning Environment (VLE) Blackboard** (www.ble.ac.uk -ITS user name and password are required).

A student intending to submit a project report in a particular year must agree a one-page project proposal form with a supervisor and submit it for approval by the deadline noted below. The project proposal should meet the following criteria:

- It identifies the objectives of the project.
- It describes the problem that the project will address and its relevance to the MSc Programme followed.
- It identifies an appropriate approach/methodology which will be followed during the project.
- It includes a project plan which shows how the project objectives can be met within the required timescale.
- It specifies College hardware or software that you hope to use in your project. This is particularly important if you intend to use something out of the ordinary. It enables the Systems Group to estimate the probable demand on their resources and to alert supervisors if there is likely to be a problem with this.

For *second year*, *part-time* students the deadline for submission of this proposal is **16 January 2012**, while for *full-time* students it is **12 March 2012**. Discussions with prospective supervisors need to be initiated well in advance of the submission deadline. There is a page recording which supervisors have agreed to supervise which students linked from

http://www.dcs.bbk.ac.uk/intranet/r/doc/studentprojects.php

so that you can see which staff members already have a full quota of students to supervise. Bear in mind, however, that a supervisor may already be in discussion with a number of potential project students well in advance of agreement of a proposal, and so only by speaking with a potential supervisor can you be sure that it is will be possible for that supervisor to consider supervising your project.

Students are responsible for maintaining contact with their supervisors during the project. Since notions of optimal interaction between student and supervisor differ, it is best to agree *in advance* what form the interaction will take. Students are entitled to expect regular exchange of emails, regular meetings and feedback on drafts of the project report, provided these are submitted to supervisors in reasonable time. If supervision does not meet the agreed criteria, the Programme Director should be contacted.

Further details on MSc AIS/INT/IWT projects and preparing project reports will be distributed during the year and published on the intranet http://vili.dcs.bbk.ac.uk/intranet/r/courses/ais/project.pdf and on Blackboard (www.ble.ac.uk).

Aim of the Project and Assessment Criteria

Students are required to submit a project specification and a project report including program documentation. The main aims of the project are to offer students the opportunity to:

- develop a systematic understanding and critical awareness of an agreed problem relevant to the MSc programme as described in a project specification document
- plan and execute a major piece of programming work appropriate to the MSc programme
- critically present existing approaches in the problem area, place their own approach in the wider area and evaluate their contribution
- gain experience in communicating complex ideas/concepts and approaches/techniques to others by writing a comprehensive, self-contained report.

Additional requirements exist depending on the Masters Programme:

- For the MSc in Advanced Information Systems, MSc in Intelligent Technologies and MSc in Information and Web Technologies, the project should build on advanced topics in computer science in order to develop a system whose design is by no means obvious at the outset of the project.
- For the MSc in Advanced Information Systems, the project should relate to one or more of the modules taught on the programme.
- For MSc in Intelligent Technologies, the project should include a strong algorithmic component in the area of intelligent technologies.
- For MSc in Information and Web Technologies, the project should be in the area of information management or web technologies.

To **pass** a project the markers assess whether the report meets the following criteria:

- *Background, research, and presentation of problem*: the report specifies a suitable problem, and discusses its requirements. It reviews the potential approaches and critically evaluates them.
- *Approach, design and implementation*: The approach that the student used to address the problem or questions is described. A suitable design methodology is chosen and there is an attempt to justify it. The key stages of the approach/methodology and the implementation are explained.
- *Testing, results, analysis and critical evaluation*: The report attempts to provide a clear and justified reflection upon the contribution and its limitations. It discusses how the software meets the specified requirements, and any problems identified. For students studying for Masters in Computer Science the report should include a software solution, which is demonstrated.
- *Presentation of report, documentation*: The report is coherent in its style and structure. It communicates the student's contribution to the reader.
- *Any other aspect of special relevance for this project.*

For a **distinction**, a student would have to attempt a challenging project and to gain a high grade under each of the above headings. To award a distinction the markers assess the report according to the following criteria:

- *Background, research, and presentation of problem*: A problem is specified, and the potential approaches are reviewed and critically evaluated. The report clearly outlines the problem, its context and the technical/user requirements. It demonstrates that the student clearly understands the relevant research material and leads logically to a solution of the problem.

- *Approach, design and implementation*: The report provides a clear justification of the research approach. It discusses the various design methodologies in an authoritative way and provides a clear justification for adopting a particular one. It presents the various stages of approach/methodology and implementation in detail and executes them to a high standard.

- *Testing, results, analysis and critical evaluation*: The solution described demonstrates real insight into the problem/research questions. There is clear and justified reflection upon the contribution and its limitations. The key results are accurately analysed and stated and their relevance is explained. The author critically assesses the results and draws relevant conclusions from the study. For students studying for Masters in Computer Science the report should demonstrate that the software solution meets the specified requirements, and is shown to be reliable.

- *Presentation of report, documentation*: Complex issues are explained clearly and concisely to a specialist audience. The content of the dissertation is well organised and structured in a way that demonstrates the links between the concepts presented. The report demonstrates that the student clearly understands the relevant research material and leads logically to a solution of the problem. The author uses various resources and cites most of the relevant sources using the appropriate consistent referencing style. The report is of professional quality, so there are very few, ideally no, typographic errors.

Work that meets some, but not all, of the criteria for distinction may be considered for a **merit**, at the discretion of the markers. A merit might be awarded for a respectable, if only partially successful, attempt at a challenging project, or for a less ambitious project carried out, and written up, to a high standard.

The separate examiners grade the project independently and then meet to arrive at an agreed grade. In addition, students might be called upon to make a presentation of their projects to a sub-committee of the Examination Board to demonstrate their grasp of the material.

Exploitation of project outputs

Students may choose to involve outside organisations, such as industrial or commercial companies (large or small), hospitals, schools, charities and so on, or their full-time employer. While this kind of "real-world" projects can provide valuable experience for students, they may carry a greater element of risk than "in-house" projects and need to be approached with more care. Students who prefer to work on their own project idea or an idea proposed by an external organisation should consult the College's "Financial Regulations and Procedures" with regards to exploitation of results (http://staff.bbk.ac.uk/fin/sectionglinks.pdf). This document states that:

"Section G 14.2.1 (ii) Except as otherwise as agreed in writing, if a student in the course of studies, produces any original works (including computer software) which may be commercially exploitable, the College shall be entitled to the copyright in such works and shall use its best endeavours to secure royalties. These will be shared as set out in the detailed code of practice".

These regulations also state: "Students are required to comply with the College procedures for notifying any invention, device, material, product or process, computer software or other potentially valua-

ble result which it is considered might have commercial significance, whether patentable or not, developed or invented during the course of students' research or study at the College".

Important dates

Submission of project proposal (second year, part-time students)	Monday 16 January 2012
Submission of project proposal (full-time students)	Monday 12 March 2012
Submission of final project report:	Monday 17 September 2012

Staff Research Interests

Staff carry out their research within two main research groups in the Department: Information Management and Web Technologies and Computational Intelligence. The London Knowledge Lab is a multi-disciplinary research centre which brings together computer scientists from Birkbeck and social scientists from the Institute of Education to explore the ways in which digital technologies and new media will shape the future of learning and knowledge. In addition, there are informal interest groups which emerge and evolve over time within and between the main research groups, for example in search engine technology, sensor networks, semantic web, computer vision, cluster analysis, adaptive systems and learning environments.

The research interests of individual staff members are as follows.

- Andrea Cali: semantic information integration, logics and databases, ontologies and databases with emphasis on query answering and optimisation, Deep Web.

- Trevor Fenner: Algorithms and data structures; combinatorial and probabilistic methods; graph theory; web models; programming languages; life sciences informatics.

- Sven Helmer: Native XML database systems; index structures; transactional management; data management for physics and astronomy.

- Roman Kontchakov: semantic data integration and ontology-based data access, ontology languages and description logics, the Semantic Web, and spatial and temporal knowledge representation and reasoning.

- Oded Lachish: algorithms and their applications, in particular sub-linear algorithms and property testing.

- Mark Levene: Web information retrieval and navigation; web data mining; adaptive web technologies; machine learning in games.

- Xuelong Li: Computer vision; pattern recognition.

- George Magoulas: Adaptive modelling from data; computational intelligence; intelligent adaptive systems; user modelling; personalised learning environments; nature-inspired learning; neural networks learning.

- Keith Mannock: Software engineering; information retrieval and hypermedia; programming languages.

- Nigel Martin: Information management, integration, analysis and mining, with a particular interest in bioinformatics and life sciences applications.

- Steve Maybank: Computer vision; CCTV surveillance; tracking; object recognition; statistics.

- Szabolcs Mikulas: Algebraic, modal and temporal logic, and its applications.

- Roger Mitton: Natural language processing; dictionaries; corpora; spell-checking for poor spellers.

- Alex Poulovassilis: Information access, integration and personalisation, learning environments.

- George Roussos: RFID, pervasive computing, wireless sensor networks.

- David Wilson: Maturity models in information systems development; strategy and cross-cultural issues in global information systems.

- Peter Wood: Query languages; rule languages; query optimisation; XML compression.

- Michael Zakharyaschev: Knowledge representation and reasoning; mathematical and computer science logic; modal, spatial, temporal and description logics.

- Dell Zhang: Machine learning; information retrieval; data mining.

Assessment and Examinations

The programme is modular, and students will be assessed in each of their 8 modules and in their project. To pass a module or the project, students must obtain a mark of at least 50%.

For each taught module there will be a 2-hour written exam in May or June. In addition, some modules have a compulsory coursework component that must be passed in order to pass the module. For other modules, the coursework and exam marks are combined according to a given weighting, without each component having to be passed separately. This information is provided in each module description.

Exams are scheduled by the College examinations office on specified dates: these are posted well in advance on the College and programme web sites and are non-negotiable. Students are required to sit their exams at the scheduled time and place at Birkbeck.

Note that examinations are held during the daytime, so part-time students will have to make arrangements with their employers to take leave of absence.

The College distributes exam entry forms that students need to complete by entering the modules and/or project elements that they are sitting in the given year. A student can only withdraw from an exam with the written permission of the Programme Director. This permission must be obtained at least 14 days before the first exam or by 1 May, whichever is earlier. Students who do not sit an exam and have not obtained permission to defer or withdraw their exam entry will be deemed to have failed the exam, except when this is due to illness or other reason beyond their control (see section Mitigating Circumstances). In these cases, documentary evidence must be submitted to the Programme Administrator and this evidence must be deemed to be satisfactory by the College. Students who withdraw from or miss an exam are usually required to enter the exam the next year. The College rules and regulations governing programmes are linked from the My Birkbeck webpage at: http://www.bbk.ac.uk/mybirkbeck/services/rules

The project is judged on a project report of about 10,000 words (maximum 15,000 words) plus related technical submissions. Details are provided in the section Project Guidelines and on the programme's intranet pages at http://www.dcs.bbk.ac.uk/intranet/r/courses/ais/ .

Simply not turning up for an exam or failing to submit a coursework or project, without permission to defer, will be considered to be the same as failing it, in the sense that it will count as one of the two attempts that you are permitted to make at passing that element.

The students should also consult the Sections on Late submission of coursework and project, Mitigating circumstances, Plagiarism and College policy on assessment offences of this Handbook.

Late Submission of Coursework and Projects

Following recommendations of the Academic Board in March 2007 and of the Department's Teaching Committee in June 2007, the process laid out below has been implemented for dealing with late submission of items of assessment (including coursework and projects) in this MSc Programme.

(i) Extensions are not allowed. The module leader or Project tutor should specify an absolute cut off deadline for late submission and communicate it to the students together with the normal submission deadline. The absolute cut off deadline should be no more than 10 working days after the normal submission.

(ii) It is Departmental policy to accept and mark late items of assessment submitted before the cut off deadline (see point i). Students do not need to negotiate new deadlines and there is no need to obtain prior consent of the module leader or project tutor in order to submit late. The Department is unable to accept submissions after the cut off deadline.

(iii) Any type of assessment submitted late is given two marks: a penalty mark of 50%, assuming it is of a pass standard, and the "real mark" that would have been awarded if the work had not been late. Both marks are given to the student on a feedback sheet. If the work is not of a pass standard a single mark is given. For modules where coursework is compulsory to pass the module but it is not marked, coursework received before the absolute cut off deadline is not penalised.

(iv) If a student believes that they have good cause to be excused the penalty for late submission, they must make a mitigating circumstances claim (see the Mitigating Circumstances section in this Handbook) for consideration by the Mitigation Sub-Committee (see point v below). The claim form and accompanying documentary evidence must be submitted within 7 days of the cut off deadline. If no such documentation is received prior to the meeting of the Mitigation Sub-Committee the "real mark" will not be considered and the penalty mark will stand. When circumstances, such as serious accident or illness, long-term hospitalization, prevent a student from submitting evidence in time, the absolute cut off deadline for submitting accompanying documentation is the first date of the examination period as specified by the College each academic year (typically examinations at Birkbeck start in the first week of May).

(v) All requests are held over and considered by a sub-group of the relevant Exam Board prior to a meeting of the full Exam Board. This sub-group, called the Mitigation Sub-Committee, will meet termly and/or prior to the full Exam Board, as appropriate, and its results are presented to the full Exam Board."

Mitigating Circumstances

The Academic Board in March 2007 approved the following guidelines for dealing with mitigating circumstances in relation to examinations and other forms of assessment in order to ensure consistent and fair practice across the College. For further information, students may consult the document on mitigating circumstances linked from:
http://www.bbk.ac.uk/mybirkbeck/services/administration/assessment/coursework/mitigating-circumstances

A Mitigating Circumstances claim should be submitted if valid detrimental circumstances result in:

- the late or non-submission of assessment;
- non-attendance of examination(s);
- poor performance in assessment.

Principles

Consideration by Boards of Examiners of claims for mitigating or extenuating circumstances are founded on the following principles:

- that students are ordinarily expected to meet all deadlines for coursework and to attend all examinations, as prescribed in the Programme Regulations, and to make a 'reasonable attempt' to answer examination questions, coursework assignments or other modes of assessment;
- that it is the students' responsibility to submit details in writing and in advance (where possible) of any mitigating circumstances they would like the Board of Examiners to take into consideration;
- that information provided by students in support of such claims shall be regarded as confidential;
- that penalties may be incurred by late- or non-submission of coursework by the due deadline or by failure to attend and attempt a prescribed examination.

Mitigating Circumstances

Not all 'circumstances' warrant the same consideration. Some are clearly beyond the reasonable control of students and some are not. The examples given below are not exhaustive but will serve as a guide to what Boards of Examiners will regard as acceptable 'mitigating circumstances' when making academic judgements. In all instances, appropriate certification (e.g. medical certificate, crime report etc.) must be provided for a circumstance beyond the reasonable control of the student to become eligible for consideration.

Examples of circumstances beyond the reasonable control of the student:

- bereavement (near relative only)
- serious accident or illness
- serious infectious disease
- burglary and theft
- childbirth

Examples of situations which may be considered beyond the reasonable control of the student:

- medical operation (if approved prior to the point of assessment or an emergency)
- hospital tests (if approved prior to the point of assessment or an emergency)
- being taken ill during an examination
- significant accident, injury, acute ailment or condition
- unanticipated and unavoidable professional obligations
- private or public transport failure leading to delays of more than 1 hour (corroborative evidence is required to verify such a delay)

Examples of circumstances that would NOT ordinarily be considered mitigating circumstances:

- accidents to friend or relatives (unless within 3 days prior to deadline or examination or where student is sole carer)
- family illness (except in an emergency or where the student is the sole carer)
- examination nerves
- feeling generally anxious, depressed or stressed (unless medically certificated and notified in advance i.e. at least 2 weeks)
- clash with paid employment
- minor accidents or injuries
- pregnancy
- cold, cough, upper respiratory tract infection, throat infection, unspecified viral infection
- childcare problems that could have been anticipated
- domestic problems (unless supported by independent evidence)
- mistaking the deadline, or time management problems (including alarm not going off)
- private or public transport failure leading to delays of less than 1 hour
- general financial problems
- legal problems (unless required to attend Court on the day of an examination or assessment)
- holidays or booked travel arrangements
- house moves
- notes burned or stolen (unless supported by a fire or police report)
- intermittent or last minute computing equipment problems (discs, machines, printers, viruses)
- handing-in problems
- inclement weather (unless exceptional/severe conditions)
- ignorance of the Regulations or examination/assessment arrangement

If a student feels their circumstances warrant consideration by the Board of Examiners they should submit a *MITIGATING CIRCUMSTANCES CLAIM FORM* (see below) to the Programme Administrator at the earliest opportunity (within 7 days of the assessment deadline or examination). In the form, students should state whether the circumstances relate to non-attendance at an examination or late submission of an assignment and should include supporting evidence (e.g. a medical certificate giving the nature and duration of any illness). They may inform their personal tutor, in confidence, of any problem they may not wish to disclose in writing. **Students should be aware that discussing their claim with a member of staff does not constitute a submission of a claim of mitigating circumstances.**

For a claim to be accepted a student must produce independent documentary evidence to show that the circumstances:

a) have detrimentally affected their performance/submission/attendance in assessment or will do so;
b) were unforeseen;
c) were out of their control and could not have been prevented;
d) relate directly to the timing of the assessment affected.

Examples of acceptable documentary evidence

- evidence (e.g. death certificate or letter from GP confirming bereavement)
- letter from lawyer, hospital, GP or employer

Examples of non-acceptable documentary evidence

- self-certification of illness
- letter written by a friend or acquaintance

MITIGATING CIRCUMSTANCES CLAIM FORM
Academic Session: 2011/2012

FOR MORE INFORMATION ON MITIGATING CIRCUMSTANCES SEE Registry's page on Regulations http://www.bbk.ac.uk/reg/regs and the MSc Programme Handbook

- You must submit this form at the earliest opportunity and at the latest within 7 days of the relevant coursework deadline or examination date. If you submit this form after this time without good cause then your claim will not be considered. Degree Examination Boards may, at their discretion, set an absolute deadline after which no application for consideration of mitigating circumstances will be considered.
- Claims that do not include relevant information or documentary evidence will not be considered
- Acceptance of Mitigating Circumstances Claims is at the discretion of the College only.
- All information submitted as a claim of mitigating circumstances will be treated as confidential.

All claims should include wherever possible original independent documentary evidence, e.g. medical certificate. If you fail to provide this information your claim may not be considered
N.B . You may resubmit a previously rejected claim only if it is supported by significant additional evidence.
Late claims should give valid reasons for the late submission of the claim.

Please complete the following information

First Name (s)			
Surname:			
ID Number:		**Programme:**	

E-Mail Address ……
You will be normally notified of the decision by email

Please list all modules for which you are submitting a claim of Mitigating Circumstances

Module Code	**Module Title**	**Assessment affected (e.g. examination, first coursework, in-class test)**	**Coursework**		**Examination**
			Deadline	Date submitted	Date of examination

FURTHER DETAILS:
Please complete the following information by ticking the appropriate box and completing the related columns.

What original evidence have you submitted?	**Tick**	**Dates covered by the evidence**
Doctor's note or other medical evidence		
Police letter or form		
Employer's letter (part-time students only)		
Death Certificate		
Other *(Please specify)*		

Please explain how the circumstances have affected your work and/or studies

GROUP WORK - If you are submitting a claim for group work you must list the names and ID numbers (if known) of all the other members of the group. Use the boxes below:

Surname	**First Name**	**ID Number (if known)**

If you are submitting your claim after the deadline (7 days before the assessment takes place) please indicate the reasons – documentary evidence should be provided

I confirm that the above information is correct ……Date ……..

Your signature

Return this form to your School Office as soon as possible.

SCHOOL OFFICE USE ONLY RECEIVED: SITS:

Plagiarism

Plagiarism is defined as "copying a whole or substantial parts of a paper from a source text (e.g. a web site, journal article, book or encyclopedia), without proper acknowledgement; paraphrasing of another's piece of work closely, with minor changes but with the essential meaning, form and/or progression of ideas maintained; piecing together sections of the work of others into a new whole; procuring a paper from a company or essay bank (including Internet sites); submitting another student's work, with or without that student's knowledge; submitting a paper written by someone else (e.g. a peer or relative), and passing it off as one's own; representing a piece of joint or group work as one's own".

There are many ways of plagiarising the work of others. Some examples are given below.

- Copying chunks of text without using quotation marks and without appropriate acknowledgement; for example, cutting-and-pasting text from website encyclopaedias or online research papers, or copying papers written by students who did a similar project.
- Copying text and making very minor changes, and without appropriate acknowledgement. This is an example of unacceptable paraphrasing.
- Copying a picture or photo from the Internet, without appropriate acknowledgement. If you use images protected by copyright you must also obtain permission from the copyright owner. See your library for guidance.
- Using another person's numerical spreadsheet, software or results, without appropriate acknowledgement.
- Duplicating your own work, for example by submitting almost exactly the same work for two different assignments, e.g. a piece of coursework and the MSc project.
- Using code developed by another person without acknowledging the original author as the person who developed it.

The College considers plagiarism a serious offence, and as such it warrants disciplinary action. This is particularly important in assessed pieces of work where plagiarism goes so far as to dishonestly claim credit for ideas that have been taken by someone else. According to paragraph 7 of the "College Policy on Assessment Offences": "A student who knowingly assists another student to plagiarise (for example by willingly giving them their own work to copy from) is committing an examination offence." The College's procedure also identifies various types of plagiarism and is available online at the My Birkbeck webpage:
http://www.bbk.ac.uk/mybirkbeck/services/administration/assessment/offences/plagiarism

Each piece of submitted coursework or project must have an "Academic Declaration" signed by the student(s), which certifies that the authors have read and understood the sections of plagiarism in this Handbook and confirm that the work is their own, with the work of others fully acknowledged. Submissions must be also accompanied by a declaration giving us permission to submit coursework to a plagiarism-testing database that the College is subscribed.

The Academic Declaration text should include the following statements: *"The author(s) certify that they have read and understood the sections of plagiarism in the Programme Handbook and confirm that the work is their own, with the work of others fully acknowledged. The author(s) give permission to submit their coursework to the plagiarism-testing database used by the College."*

If you submit work without acknowledgement or reference of other students (or other people), then this is one of the most serious forms of plagiarism. When you wish to include material that is not the result of your own efforts alone, you should make a reference to their contribution, just as if that were a published piece of work. You should put a clear acknowledgement (either in the text itself, or as a footnote) identifying the students that you have worked with, and the contribution that they have made to your submission.

The “College Guideline for Prevention of Plagiarism” also states: “Schools have the right to request any piece of assessment to be submitted for screening by a College approved plagiarism detection service. A deadline for this submission may also be set by the relevant School. Failure to comply with any such request, or failure to meet the relevant deadline, will constitute an assessment offence and will be dealt with according to the College Policy on Assessment Offences.”

For an update on procedures for dealing with plagiarism in the School, students can consult the following document: http://vili.dcs.bbk.ac.uk/intranet/s/policy/plagiarism-procedure.pdf

Avoiding plagiarism

The College offers the learning module “Avoiding Plagiarism” on Blackboard VLE to all students. This module will help you understand plagiarism and explain in detail how one can avoid plagiarism. Below some examples are given from this module.

Citing other peoples’ work properly

Citations give brief details of the source at the point in the text where the source is used.

Citations using the Harvard system show the author and date of publication and the page number for quotations. For example:

Oakshott (2001) argues that ...
Or
Oakshott (2001, p. 3) argues that "democracy is dead".

If a quotation is longer than two or three lines, it is often indented using block formatting. By convention, block quotations do not usually need quotation marks - check with your course lecturer for guidance.

For example:

Worsley (2002) argues that Karl Marx is still very influential:
Karl Marx has probably affected the course of twentieth-century history more than any other single thinker. Because of this, his ideas have generated a vast output of writings (Worsley, 2002, p. 1).

Reference:
Worsley, P., 2002. Marx and Marxism. 2nd edn. London: Routledge.

Referencing

References include the full bibliographic information about the source, such as the author(s)'s name(s), date of publication, title of work, place of publication, and publisher. This information is usually given in the section called Reference List or Bibliography at the end of the text. The key principle is that you should give enough information to allow another person to find the source for themselves.

Here are some examples using the Harvard referencing system:

[when you are referring to a book]

Lewin, K., 1951. Field Theory in Social Science. New York: Harper and Row.

[when you are referring to a chapter in a book, where 'ed.' means editor, and 'edn.' means 'edition']

Piaget, J., 1970. Piaget's theory. In: P. Smith, ed., Handbook of child psychology. 3rd edn. New York: Wiley, 1970, pp. 34-76.

[when you are referring to a journal article]

Holmqvist, M., 2003. A Dynamic Model of Intra- and Interorganizational Learning. Organization Studies, 24(1), 95-123.

[when you are referring to a webpage]

W3C, Web Accessibility Guidelines and Techniques, available online at http://www.w3.org/WAI/guid-tech.html. Last accessed 12/05/2007.

Independent of their type (e.g. book, article, webpage), all references are included at the end of a document in alphabetical order starting from the author's name as in the example above.

Paraphrasing

Here are some examples from the plagiarism module that might help you to understand which forms of paraphrasing are acceptable and which are treated as plagiarism.

First, the original extract is give, taken from the book, Marx and Marxism, by Peter Worsley.

Karl Marx has probably affected the course of twentieth-century history more than any other single thinker. Because of this, his ideas have generated a vast output of writings, ranging from texts written by revolutionaries aimed at telling people how to do revolution - how to carry on Marx's work of demolishing capitalism and creating a new socialist society - to the many hundreds of volumes dedicated to proving that Marx was wrong about practically everything.

Acceptable practice: Worsley (2002) suggests that Karl Marx has had a significant impact on the course of twentieth-century history. He argues that Marx's ideas have led to a great deal of writing, across a spectrum from promoting his call for revolution to trying to show he was wrong in his analysis and predictions.

Plagiarism: Karl Marx, the inspiration for revolutionary activity in many countries, has probably affected the course of 20C history more than almost any other thinker. Because of this, his ideas have generated a vast output of writings, ranging from books written about revolution - how to demolish capitalism and create a new socialist society - to books dedicated to proving that Marx was wrong about practically everything.

Copying the whole text without using quotation marks and without appropriate acknowledgement is considered plagiarism: Karl Marx has probably affected the course of twentieth-century history more than any other single thinker. Because of this, his ideas have generated a vast output of writings, ranging from texts written by revolutionaries aimed at telling people how to do revolution - how to carry on Marx's work of demolishing capitalism and creating a new socialist society - to the many hundreds of volumes dedicated to proving that Marx was wrong about practically everything.

College Policy on Assessment Offences

An assessment offence is defined as "any attempt whether successful or unsuccessful to achieve an unfair advantage in any element of assessment over other candidates participating in the assessment". Assessment Offences are categorised as *Plagiarism, Collusion, Examination Offences and Other Offences*. This policy may apply to any piece of work submitted for formal assessment towards a College or University award at Birkbeck, University of London.

The policy has two stages depending on the severity of the offence. The first stage provides for a panel hearing at the School level. The second stage provides for College level proceedings.

Penalties are severe up to immediate termination of the student's registration and enrolment with no award made for credits so far attained.

Students should consult the document entitled "Policy on Assessment Offences" for definitions of the various offences and determination of the associated penalties. This is linked from the My Birkbeck webpage: http://www.bbk.ac.uk/mybirkbeck/services/administration/assessment/offences

Award of the MSc

The award of the degree is considered by an Examination Board that meets in November, after which students are notified of their results by the College. The Examination Board also meets in July to consider the results of the modules examined in May/June. After this meeting, the School informs students by letter of their overall progress, but only the College is allowed to inform students of the actual marks received for each module, normally in August.

To be awarded the MSc, students must pass the project and at least 6 of their 8 modules; they must obtain an average mark of at least 50% over the 8 modules and project, and at least 40% in any modules failed.

To be awarded the MSc with Merit, students must obtain an average mark of at least 60% over the 8 modules and project, at least 40% in any module failed.

To be awarded the MSc with Distinction, students must obtain an average mark of at least 70% over the 8 modules and project. Students must normally achieve a mark of at least 70% in the project in order to be awarded a distinction.

In calculating the average mark, the module marks and project mark are weighted to reflect their credit value. Each MSc module available on the programme has a value of 15 credits while the project has a value of 60 credits giving a total of 180 credits for the 8 modules and the project.

Students who have exhausted their opportunities for resits or project re-takes may ask the Examination Board to consider the award of a Pg Cert or PgDip in Advanced Information Systems provided they have passed modules of at least 60 or 120 credits respectively (no compensation for failed modules is allowed).

Progression to the 2nd year of part-time study

First year part-time students must normally pass at least three modules in order to proceed to the second year of study. Students who do not achieve this will not be able to complete their studies in two years. Instead they will have to spend at least one year as a Revision Student, retaking the failed modules. Under normal circumstances this would take place the following year and students would not be allowed to take any new modules until they had passed the failed modules. However, because modules on this programme are taught in the evenings on alternate years only, doing so would mean that students in their third year would have no new modules available to them in the evenings. This would have the effect of extending the duration of the degree to at least four years.

As a result, we permit students in such circumstances to enrol on four new modules in their second year, postponing their second attempts at the failed modules to the third year. This is not ideal, but seems preferable to extending the duration of the degree.

Resitting Elements of the Assessment

Students who do not meet one of the criteria for the award of the MSc may be allowed to resit a failed project or any failed module. You may resit the coursework or the written exam of a taught module if your marks for that element are below 50%. A student who fails the project or any module at the first attempt is allowed just one more attempt, normally in the following year. A student who fails the project or any module twice fails the MSc.

A student who is taking only previously failed modules may enrol as a Revision Student, at a reduced fee, to prepare for the resit. Students taking new modules pay the regular fee.

Enrolment as a Revision Student or Project-Only Student

If you wish to attend some of the lecture courses again or resit some of the coursework, you must enrol as a part-time Revision Student. In this case, you enrol in October and you pay half the regular part-time fee for the year.

It is also possible to enrol as a part-time Revision Student at Easter, for the remainder of the academic year, if you wish to attend revision lectures in the summer term or to submit answers to past exam questions to the relevant lecturers for marking. In this case the fee is one quarter of the year's regular part-time fee.

It is not essential to re-enrol in order to resit written exams; you may simply complete the examination entry forms (obtainable from the Postgraduate Administrator in February/March) and pay an exam entrance fee. Candidates who enrol as Revision Students do not have to pay a further fee for the examination entrance. Non-enrolled students may not attend lectures or use the Department's facilities. They may, however, make use of the Birkbeck library, for a fee of £50 (you need a letter from the Postgraduate Administrator confirming your status).

Students for whom the project is the only part of the programme that remains to be completed may enrol as Project-Only students, at one third of the regular fee, until the end of the term in which they submit their project. Regardless of when a project is submitted, it is examined only at the November meeting of the Examination Board.

Deferral

In **exceptional cases**, students may be permitted to defer the written exams to the following year. Students wishing to defer must apply by filling in a deferral form (shown below and available from the programme intranet pages) setting out the reasons for the deferral request, and returning it to the programme administrator for authorisation before being sent to the Examinations Office. **Registry's deadline for deferral applications is May 1st for summer assessments.** A student who defers an element of assessment has to enter for that element the following year; normally no further deferrals are permitted.

Students can apply to defer the examination of their project to the following September (i.e. at the end of an extra year of study). Students who wish to defer project submission should fill in the deferral form and return it to the Programme Administrator by **31 August**.

Simply not turning up for an exam or failing to submit a coursework or project, without permission to defer, will be considered to be the same as failing it, in the sense that it will count as one of the two attempts that you are permitted to make at passing that element, except when this is due to illness or other reason beyond your control in which case a mitigating circumstances claim must be made within 7 days of the examination date or submission deadline (see the Section on mitigating circumstances). Students who withdraw from or miss an exam are usually required to enter the exam the next year

NOTIFICATION OF DEFERRAL FROM ASSESSMENTS*

This form must be received and approved by the relevant Academic Programme Director / Academic Examinations Officer before 1 May for summer assessments, and in the case of September assessments by 1 August.

SECTION A: For Completion by candidate (Please Print)

Surname:	**First Name(s):**
Student Number:	**Date of Birth:**
Degree:	**Year of Study:**

I wish to defer the following assessment(s)*:

Module Code	Module Title

State the reason and attach any supporting documentary evidence. Continue on the reverse of this form if necessary:

Signature of candidate: _____ Date:_____

SECTION B: For completion by student's School/Department

I certify that the student named above has been granted permission to defer‡ the above assessments*

Authorising Academic: _____Signature: _____

Position: _____ Date: _____

‡ The Board of Examiners will be expected to agree a final decision for these assessment(s): to **repeat** all elements of assessment for the course unit / module or to **defer** specified elements.

Please return the completed signed form to: The Examinations Officer, Registry, Malet St.

* For the purposes of this form "Assessment" refers to any type of assessment whether by written examination and/or by submission of coursework/ project/ dissertation.

Break in Studies and Withdrawal from a Programme of Study

A break in studies would normally be for a period of one academic year, but may be permitted for a shorter period of one or two terms depending on the structure of the programme. Applications for a break in studies of less than one term will not be considered. Students who miss lectures or seminars for ill health or other reasons should discuss ways of catching up with missed work with their supervisors

Students may spend a maximum of two years during their programme on "Break in Study" status. This may be in one period of two years, or non-consecutive shorter periods that add up to a total of two years or less.

For a break of longer than one year, the student should re-confirm their intention to return by the agreed date, or apply for a longer break as appropriate. A break in studies will commence on the day following the last recorded date of attendance. Students who have not re-enrolled or communicated their intentions towards the studies by the end of this period shall be withdrawn from the programme of study.

Applications for a break in study should be made by the student in writing to their Programme Director, who is responsible for considering the application. Students applying for an approved break in study should give details of the length of the proposed break and the reasons for the application to their Programme Director.

Students may undertake re-assessments during a Break in Study but may not retake a module or attempt a module for the first time.

Students will not be liable for fees while on an approved break in studies. However, students who have attended for part of a term will normally be liable for the fees due in that term, unless there are mitigating circumstances.

Any student who withdraws from their programme of study at the College must do so in writing to the College Registry. A student who withdraws from a programme of study at the College shall cease immediately to be a registered student at the college. A student who withdraws after the published deadline shall still be liable for any outstanding fees or fines or other associated costs.

Disability Support Services

At Birkbeck there are students with a wide range of disabilities including dyslexia, visual or hearing impairments, mobility difficulties, mental health needs, HIV, ME, respiratory conditions etc. Many of them have benefited from the advice and support provided by the College's disability service.

The Disability Office

The College has a Disability Office located on the main corridor of the Malet Street building. We have a Disability Service Manager, Mark Pimm, and a Disability Advisor, Steve Short.

Mark is your first point of referral for disability enquiries at the College whilst Steve is for dyslexia. They can provide advice and support on travel and parking, physical access, the Disabled Students' Allowance, special equipment, personal support, examination arrangements etc. If you have a disability or dyslexia, we recommend you come to our drop in session where we can discuss support and make follow up appointments as necessary. The drop in sessions are between 4pm and 6pm Monday to Friday.

At your first appointment at the Disability Office they will ask you to complete a Confidentiality Consent Form. This allows you to state who in the College can be informed of your disability. Remember, if you wish, we do not need to inform people of the exact nature of your disability, just your disability related needs.

They will also complete an Individual Student Support Agreement form, confirming your support requirements and send this to your School and relevant Departments at the College so they are informed of your needs.

Access at Birkbeck

Birkbeck's main buildings have wheelchair access, accessible lifts and toilets, our reception desks have induction loops for people with hearing impairments and we have large print and tactile signage. Disabled parking, lockers, specialist seating in lectures and seminars and portable induction loops etc can all be arranged by the Disability Office.

The Disabled Students' Allowance

UK and most EU students with disabilities on undergraduate and postgraduate courses are eligible to apply for the Disabled Students' Allowance (DSA). The DSA usually provides **thousands of pounds worth of support** and all the evidence shows that students who receive it are more likely to complete their courses successfully. The Disability Office can provide further information on the DSA and can assist you in applying to Student Finance England for this support.

The Personal Assistance Scheme

Some students need a personal assistant to provide support on their course, for example a note-taker, sign language interpreter, reader, personal assistant, disability mentor or dyslexia support tutor. Birkbeck uses a specialist agency to recruit Personal Assistants and they can assist you with recruiting, training and paying your personal assistant. Please contact Steve for information on this scheme.

Support in your School

The provision which can be made for students with disabilities by Schools is set out in the Procedures for Students with Disabilities. This is available from the Disability Office and the Disability website (see below).

As mentioned above your School will receive a copy of your Individual Student Support Agreement from the Disability Office. This will make specific recommendations about the support you should receive from the School.

Support in IT Services and Library Services
There is a comprehensive range of specialist equipment for students with disabilities in IT Services. This includes software packages for dyslexic students (TextHELP Read and Write and Inspiration), screen reading and character enhancing software for students with visual impairments, specialist scanning software, large monitors, ergonomic mice and keyboards, specialist orthopaedic chairs etc. For advice and assistance please contact Disability IT Support. There is also a range of specialist equipment in the Library including a CCTV reading machine for visually impaired students as well as specialist orthopaedic chairs and writing slopes. The Disability Office refers all students with disabilities to the Library Access Support service who provides a comprehensive range of services for students with disabilities.

Specific Learning Difficulties (Dyslexia)
Mature students who experienced problems at school are often unaware that these problems may result from their being dyslexic. Whilst dyslexia cannot be cured, you can learn strategies which make studying significantly easier. If you think you may be dyslexic you should contact Steve, he can screen you and where appropriate refer you to an Educational Psychologist for a dyslexia assessment. These assessments cost £215. Some students can receive assistance in meeting this cost from their employer. In exceptional cases students may receive assistance from the Access to Learning Fund.

Examinations
Students with disabilities and dyslexia may be eligible for special arrangements for examinations e.g. extra time, use of a word processor, amanuensis, enlarged examination papers etc. In order to receive special arrangements a student must provide Medical Evidence of their disability (or an Educational Psychologist's Report if you are dyslexic) to the Disability Office. For School examinations you should contact your Programme Director to request special arrangements at least 2 weeks before the examination. For main College summer examinations you are given the opportunity to declare that you require special provision on your assessment entry form. Students who require provision should then attend an appointment with the Disability Office to discuss and formalise the appropriate arrangements. The closing date for making special examination arrangements in College examinations is the 15th March and beyond this date consideration will only be given to emergency cases.

The Disability Handbook
The Disability Handbook provides detailed information on the support available from the College. Copies are available from all main reception areas, the Disability Office and from the College disability web site at: http://www.bbk.ac.uk/mybirkbeck/services/facilities/disability

For further information or to make an appointment to see Mark or Steve, please call Steve Short (Disability Advisor) on 020 7631 6336 or email disability@bbk.ac.uk.

Disability and Student Support Team Contact details:

Mark Pimm
Disability Co-ordinator
Room G057 Registry
Birkbeck College
Malet Street
London WC1E 7HX
Telephone: 020 7631 6315
Email: m.pimm@bbk.ac.uk

Steve Short
Disability Administrator
Room G057 Registry
Birkbeck College
Malet Street
London WC1E 7HX
Telephone: 020 7631 6336
Email: disability@bbk.ac.uk

Lisa Mayer
Assistant Examinations Officer
Telephone: 020 7631 6598
l.mayer@bbk.ac.uk

The Student Financial Support Office
Telephone: 020 7631 6362

Jackie Barnes
Examinations Officer
Telephone: 020 7631 6385

President of the Student Union
Telephone: 020 7631 6365
Email: president@bcsu.bbk.ac.uk
Web address: www.bbk.ac.uk/su

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IT Services (ITS)

Access to College IT facilities and services is controlled by using a username and password. IT Services (ITS) usernames and passwords are allocated to registered students of Birkbeck College.

Accepted applicants for undergraduate and postgraduate degree courses will receive details from ITS of the username and password for the purpose of on-line enrolment. Following completion of enrolment, registered students will be able to access the full range of IT services. Details of the allocated email address and an *Overview to ITS for Students* are included in the communication students will receive from ITS. Please note the account and email address are not operational until the enrolment has been completed, until then the username and password can only be used for on-line enrolment.

Returning students should continue to use the same account they were previously allocated. If you forget your password, visit www.bbk.ac.uk/its/mycomputeraccount - if you have registered an external email address with the Registry then it may be possible to send you a new password, otherwise you will have to contact the ITS Helpdesk.

You are expected to be familiar with the College Computing Regulations which are available at: http://www.bbk.ac.uk/hr/policies_services/policies_az/computing_regulations

ITS resources include:

- 8 PC workstation rooms
- Wireless network
- Wide range of general office and specialist computer applications
- Web-based electronic mail
- Blackboard Virtual Learning Environment
- Assistive technology facilities
- Training workshops and self-training materials
- Remote access to College electronic resources and services from home or work

You can find out more about these services and others by visiting our website at: www.bbk.ac.uk/its

Your Birkbeck email address will be used for official Birkbeck correspondence so you should check it at least once a week. Alternatively you can forward all email sent to this address to another email address that you do regularly check, instructions on how to do this are on the ITS website.

There is a text message news flash service which enables students to receive free urgent messages from the College via their mobile phones. You are encouraged to subscribe. Full details are available at: www.bbk.ac.uk/its/services/sms

Your ITS username and password will not necessarily work on systems that are locally managed by Schools and departments. Schools and departments who have locally managed equipment include Computer Science, Crystallography, Economics and Psychology, and your School will provide details of access. Students are allocated personal storage space on a networked file server. Files will remain on the server for one year after you leave.

Your username, password and email address will normally remain valid as long as you remain a paid up undergraduate or postgraduate student of Birkbeck College. However, if we have reason to think that the security of an account has been compromised your account could be suspended without warning and you will need to visit the ITS Helpdesk to have it reinstated.

ITS Helpdesk Opening Hours

Ground Floor (next to Library entrance), Malet Street Main Building

Term time:	Monday to Friday	9:00am to 8:00pm
Vacations:	Monday to Friday	10:00am to 6:00pm

Tel: 020 7631 6543 Email: **its-helpdesk@bbk.ac.uk**

Library Services

Although lectures and computing sessions are essential elements of your course, success in learning depends largely on the reading and research that you undertake. Most items on module reading lists can be found in Birkbeck Library and it is important that you familiarise yourself with the Library as soon as you can. At postgraduate level, you will also be expected to use other libraries during your studies.

The entrance to Birkbeck Library is on the ground floor of the main building in Malet Street. Your College ID card gives you automatic access to the Library. There is no need to register. The opening times of the Library are designed to meet the needs of part-time students in full-time work. During term-time, the Library is open

- Monday – Friday 8.30am – 11.45pm
- Saturday – Sunday 8.30am – 11.45pm

You can borrow up to 15 items and they can be renewed as long as no-one else requests them. Most books can be borrowed for 3 weeks. Some books, videos and DVDs can be borrowed for 1 week. A few items can only be issued for 1 day. There is also a Reading Room Collection with reference access to key course readings.

Please be a responsible Library user. The smooth running of the Library depends on your co-operation. Please renew or return items promptly, especially if someone else has requested them. If you fail to return items on time you will incur fines and your borrowing rights will be suspended. Students who have overdue items at the end of the academic year will have examination results withheld until the items are returned.

The Library website is at http://www.bbk.ac.uk/lib. As well as giving comprehensive information about the Library's services and collections, you can also:

- Search the Library catalogue, renew your books and place reservations on items that are out on loan.
- Read articles in over 25,000 electronic journal titles and newspapers.
- Search databases to help you find out what has been written about the subject you are researching, including the *ACM* and *IEEE Digital Libraries*, *Business Source Premier*, *Nexis UK* and the *Science* and *Social Sciences Citation Index.*
- Access past exam papers.
- Work through *LIFE* – an online tutorial to help you make the most of the Library.

As well as its physical holdings, the Library has a comprehensive range of e-resources including bibliographic databases (which tell you what has been written on a topic), and electronic journals. Most of the electronic resources can be accessed from outside the College using your IT Services username and password. If you did not receive this upon enrolment, please ask for them at IT Services reception (Malet Street).

The LAMP Service (**L**ibr**A**ry **M**aterials by **P**ost) is a subscription based service which enables you to have books and photocopies of articles posted to your home address. You may find it particularly useful if you are not able to visit the library frequently. Birkbeck students with disabilities may be able to join the service for free on the recommendation of the College Disability Officer, Mark Pimm. If you think you may be eligible for free membership, please first contact Mark Pimm in the Disability Office.

The College Library also runs an interlibrary loan service to enable you to obtain copies of books and articles not held in its own collections. As it can take a couple of weeks to obtain copies of requested materials, you are advised to plan ahead in your general reading and essay preparation so as to make use of this facility. Please note: a charge of £1 will be made for each interlibrary loan request received and there is a limit of 10 requests in progress at any one time.

Birkbeck students can also use a range of other libraries. Students have reference access to most University of London college libraries. In addition, postgraduate students can join the *SCONUL Access Scheme* which allows access to most other higher education libraries with limited borrowing rights. See the Library web site for more information.

An introduction to the Library and bibliographical skills is timetabled at the start of your course at which you will meet the Subject Librarian who looks after the collection. They will introduce you to the Library and its electronic resources. In addition, the Library has an online tutorial called LIFE (Library Induction for Everyone) which is always available: http://www.bbk.ac.uk/lib/life/ which has a module in it on 'Researching a topic'.

If a book you need is not available in the Library or you require any assistance using the resources or finding information, please ask at the Help Desk. Telephone: 020 7631 6063. Alternatively, contact your Subject Librarian, **Kate Purcell**, directly. Telephone: 020 7631 6062. Email k.purcell@bbk.ac.uk

Other Resources and Organisations

Birkbeck Student Union
You are automatically a member of the Birkbeck Students' Union, the University of London Union and NUS upon taking up the offer of a place to study at Birkbeck. NUS cards are available online (NUS Extra) or from the Union Office, Malet Street. Application can be made to become a member of the International Students' Association by completing a form that can also be obtained from their shop.

Location and Telephone: Offices on the 4th Floor of the extension building in Malet Street. General Union Office is in Room 456, Tel: 020 7631 6335. Enquiries: administrator@bcsu.bbk.ac.uk . Visit the website at http://www.birkbeckunion.org/ .

Counselling
The Students' Union offers counselling free of charge.

Birkbeck Evening Nursery
Birkbeck College has an Evening Nursery, which is available for students and current members of staff and accepts children aged 2-10 years. In exceptional circumstances, children up to 12 will be accepted. However, Nursery Staff reserve the right not to accept older children if they are disruptive. Full details, including opening times, may be found at: www.bbk.ac.uk/pers/nursery.

Career Development
Most students are interested in developing their careers, either within their current field of work or in a completely new direction. **The Specialist Institutions' Careers Service [SICS],** part of The Careers Group, University of London, offers great expertise and experience in working with students and graduates of **all** ages and at **all** stages of career development. And it's Birkbeck's next-door neighbour!

During term-time they offer an Early Evening Advisory Service specifically and exclusively for evening students and a Drop-In Advice Service, which is always very popular with the Birkbeck students.

Longer Advisory Interviews can be arranged if necessary - for complete career beginners, for people wanting a practice job interview, and for every stage and situation in between.

They also offer Psychometric Testing and Personality Assessment Workshops, Employer Presentations, Computer-based Career Guidance Programs, Insight Career Courses as well as invaluable information on Course Funding.

For more information and opening times visit the SICS website at:
http://www.careers.lon.ac.uk/sics .