



CITY UNIVERSITY
LONDON

School of Community and Health Sciences

RN/Diploma/BSc (Hons) Children's Nursing
2009 Curriculum

Applied Biological Sciences Theme (ABS)
Fundamental Aspects of Care Theme (FACT)

Module Handbook

**Developing Children's Nursing Practice,
Pathology and Related Pharmacology**
NM2762

September 2009 cohort

Year 2 (September 2010 – August 2011)

Details of Module Leader

This module is taught across the Applied Biological Sciences theme (ABS) and Fundamental Aspects of Care Theme (FACT), with module leaders for each theme:

Module Leader – ABS :	Agnes Kanneh
Room and site:	Room 220, West Smithfield
Telephone number:	0207 040 5479
Email address:	A.B.Kanneh@city.ac.uk

Module Leaders – FACT :	Billie Kell Michelle Ellis
Room and site:	Room G10, Whitechapel Room G10, Whitechapel
Telephone number:	0207 040 5766 0207 040 5902
Email address:	Billie.Kell.1@city.ac.uk M.Ellis@city.ac.uk

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**Developing Children's Nursing Practice,
Pathology and Related Pharmacology
NM2762**

Level:	Level 2
Year of Programme:	Year 2, September 2009 cohort
Dates running:	September 2010 – August 2011

INTRODUCTION

This Child Health branch module will help you to further develop and consolidate nursing knowledge and skills and prepare you to undertake care delivery activities in primary, secondary and tertiary settings. Some learning will be shared with mental health nursing students, exploring both physical and mental health theory and practice across the lifespan. Biological sciences theory provides the scientific basis for nursing practice. The acquisition of a reliable, up-to-date biological theory by the children's nurse is fundamental to safe, effective professional practice in every healthcare setting. This applied clinical knowledge should be the defining characteristic of the professional in the context of today's society. This contributes towards meeting the goals of the National Service Framework for Children and Young People (DH 2004a) and NMC (2004) Nursing proficiencies. This module also takes into consideration the NMC essential skills clusters, which are demonstrated in your record of achievement in practice (portfolio).

AIMS OF THE MODULE

The aim of this module is to provide you with the biological sciences theory, practical caring skills and knowledge to support your development as a children's nurse through the branch programme and in relation to the NSF requirements and NMC proficiencies. You will develop knowledge and competence to deliver increasingly complex care for neonates, infants, children and young people in a range of mental and physical care settings. You will be able to provide care which is appropriate, coordinated, multi-disciplinary, integrated and family centred, and which safeguards and promotes the welfare of vulnerable children. You will be able to explore your own

values and beliefs and those of others in the delivery of the fundamental aspects of care through the integration of practical and theoretical experiences.

LEARNING OUTCOMES

On successful completion of this module, you will be expected to be able to:

Skills

- Demonstrate how biological sciences theory promotes critical thinking in practice related to children's nursing. (NMC 1.3, 4.1)
- Demonstrate an understanding of the rationale for interventions undertaken in relation to implementing the core components of Essence of Care (NMC 2.18)
- Demonstrate basic communication and counselling skills (NMC 2.3, 2.11, 2.4)
- Participate in and contribute to health promotion activities (NMC 2.4)
- Analyse the key concepts relating to risk and resilience (NMC 3.1, 3.2, 3.3, 3.4, 3.5, 3.7, 3.8)
- Demonstrate understanding and skills in medicines administration to different age groups of children and young people (NMC 3.1, 3.12, 3.13, 3.14)
- Participate in the holistic assessment of an individual's health care needs (NMC 2.1, 2.15, 2.16, 2.6, 2.7, 2.8)
- Apply biological theory to structure nursing care that minimises or prevents complications/adverse effects (NMC 2.3, 2.4, 2.5, 2.8, 2.9, 2.11, 2.13, 2.16, 2.17, 3.1)
- Identify key data required to undertake a valid risk assessment (NMC 2.1, 2.15, 2.16, 2.6, 2.7, 2.8)
- Demonstrate the principles of safe and effective cardiopulmonary resuscitation management within a simulated environment (NMC 2.6, 2.10).
- Identify and demonstrate knowledge of the rights (UN Convention Article 23) and the vulnerability of disabled children and young people and explore the systems which are in place to safeguard these children (NMC 3.2, 3.4, 3.5, 3.6)
- Employ current recognised techniques for moving and handling following a completion of a risk assessment (NMC 2.13, 2.14, 2.15, 2.16)

- Articulate the relevance of biological sciences theory in care delivery/management of children/young people and the family that requires numeracy skills, knowledge of information technology, and the safe use and maintenance of mechanical devices (NMC 2.1, 2.4, 2.9, 2.14, 3.3, 3.4, 3.7, 3.14)
- Utilising the framework of essence of care apply knowledge and skills in caring for children and families (NMC 3.11, 2.21, 2.17)
- Apply knowledge in relation to caring for children with acute and chronic conditions (NMC 3.2, 2.23, 2.19)

Knowledge/Understanding

- Demonstrate reliable biological sciences theory that informs practice and enables them to structure, prioritise, implement and evaluate care for the child/young person and family safely and effectively. (NMC 1.9, 2.4, 2.9, 2.18, 2.22)
- Discuss the ways in which government policy affects service planning and service provision which incorporates multi-agency co-operation to safeguard and promote children's health (NMC 2.3,2.4,2.5)
- Identify the issues associated with ensuring that the majority of services for children are provided outside of hospital settings (NMC 1.11, 1.12)
- Discuss how effective palliative care services are developed, specific care needs assessed, planned, delivered and evaluated for those children who require it and how families are supported in the event of a child dying (NMC 3.7, 3.8, 3.11)
- Define the principles of medication management (NMC 1.1, 3.1, 3.12, 3.13, 3.14)
- Explain relevant psychological theories of communication underpinning communication skills (MNC 1.12, 2.1, 2.3, 2.4)
- Articulate an understanding of the roles and responsibilities of all agencies involved in children's care in the identification of children who have been harmed and subsequent care management (NMC 2.6,2.7)

Values and Attitudes

- Discuss the relevance of biological sciences theory, and related evidence, which enables the student to show awareness of their roles, responsibilities and limitations in their abilities to provide safe, humanistic and effective delivery of

care for children, young people and their families, e.g. Infection control, medicines management, ward-based life support, peri-operative care. (NMC 1.4, 1.8, 1.9, 1.12, 1.14, 2.8, 4.4)

- Critically analyse the quality of care offered to children and families through the development and use of current research based evidence, local, national guidelines (NMC 1.1, 1.2)

OVERVIEW OF MODULE CONTENT AND SESSIONS

Fundamental Aspects of Care

- Theoretical aspects of children's nursing
- Critiquing models
- Managing CPR: all settings
- Effects of illness on children and families
- Respite care
- Assessing children and families
- Moving and Handling
- Food and Nutrition
- Communicating with children, young people and families
- Child protection
- Assessment and development of a care plan
- Principles of caring for children with respiratory conditions (asthma, bronchiolitis, pneumonia, cystic fibrosis)
- Principles of caring for a child with an orthopaedic condition including neurovascular observations
- Principles of caring for a child with urinary problems (nephrotic syndrome, UTI, pyelonephritis, glomerulonephritis)
- Managing a child with gastroenteritis
- Principles of caring for a child following a head injury including neurological observations
- Principles of caring for the convulsing child (febrile convulsions, epilepsy, meningitis, hypoglycaemia)

- Principles of caring for the child with an anaphylactic reaction
- Neonatal positioning and nutrition
- Introduction to collaborative practice
- Policy frameworks and their application
- Developing awareness of personal and professional values and setting boundaries
- Theoretical foundations
- Early interventions in psychosis
- Working with families
- Practice and communication (engagement, assessment and the CAF), child protection
- Adolescent inpatient care
- Communication skills – assertiveness and negotiation
- Care of the child and family with complex needs and learning disabilities
- Neurodegenerative and genetic disorders
- Death and dying
- Needs of looked after children
- Working with children and young people who self harm
- Suicide within families
- Adolescent risk taking behaviours including drugs and alcohol
- Eating disorders
- Therapeutic relationships

Applied Biology

- Core pharmacological concepts
- Pharmacology in the young – specific issues
- Analgesia
- Anaesthetics
- Antimicrobials and antivirals
- Epilepsy and related pharmacology
- Introduction to childhood growth and development
- Biological features of the term neonate and neonatal health

- Adolescent growth and development: theories and processes
- Body fluids, electrolytes and dehydration in children and young people
- Nutritional requirements in infancy, childhood and adolescence
- Childhood malnutrition and obesity
- Immunity and immunisation in children and young people
- Fever in children and febrile convulsions
- The developmental biology of the respiratory system
- Respiratory tract infections in infants, children and young people
- Pathophysiology of asthma and pharmacological interventions
- Bone growth, development and pathophysiology of childhood fractures
- Development of the urinary system and UTI in infants, children and young people
- Pathophysiology and therapeutics of childhood gastroenteritis
- Overview of the nervous system and CNS development
- The neurobiology and therapeutics of pain in infants, children and young people
- Auditory and visual development
- Biological basis of head injury and neurological observations in children and young people
- The biological basis of substance abuse in children and young people
- Pathophysiology and therapeutics of cerebral palsy
- Pathophysiology and therapeutics of meningitis in children and young people
- Pathophysiology and therapeutics of HIV in children and young people
- Pathology and pharmacology of the pre-term neonate
- Congenital anomalies
- Overview of embryological development
- Fundamental genetics
- Pathophysiology and therapeutics of haemoglobinopathies
- Pathophysiology and therapeutics of diabetes mellitus
- Pathophysiology and therapeutics of cystic fibrosis
- Acid-base balance in children and young people
- Acute respiratory failure in infants, children and young people
- Shock in children and young people
- Pathophysiology and therapeutics of childhood cancers

LEARNING AND TEACHING METHODS

Lead Lectures

Lectures enable information to be presented in a logical manner to groups of students. This is a useful method for presenting an overview of new material and stimulating you to read further around this subject.

Small Groups (including role-play, seminars, debates, Enquiry Based Learning (EBL), reflection sessions, skills workshops)

Small groups will encourage the application of theory to practice and extend the depth and breadth of your knowledge. They encourage team working and can be motivating, enhance communication skills and challenge powers of reasoning. These provide opportunities for debate, exploration of personal thoughts, ideas and practice experiences.

Personal Tutorials

Tutorials and reflection on learning with the personal tutor enable individual progress to be discussed as well as issues of concern about the programme raised. Tutorials also offer you pastoral support.

Laboratory Practicals

To enable the consolidation of material taught in the lectures facilitate the acquisition of manual and team skills and provide opportunities for you to use conceptual knowledge and cognitive processes to solve problems.

Simulated Practice

These activities are devoted to development of technical or interpersonal skills. In particular, statutory training required before commencement of placements will be delivered in clinical skills laboratories. You will then be expected to demonstrate the particular technical caring activity utilising all the relevant skills, knowledge and attitudes that are required for delivery of the fundamental aspect of care. Virtual learning and simulated learning experiences will be used to promote understanding of user/carer perspectives, real life placement activities and risk management

responsibilities, as well as professional responsibilities.

Other Learning activities

A range of other activities may be used to support your student-directed learning hours, including e-learning, workbooks, videos, computer learning packages and Reusable Learning Objects (RLOs – Applied Biology Specific). All these activities facilitate your learning through you being able to pursue further study at your own pace and at different depths of learning dependent upon your needs.

MODULE ASSESSMENT

There are two assessments for this module, a Biology examination (ABS) and an Objective Structured Clinical Examination (OSCE) (FACT). For further details please see the separate assessment specification.

READING LIST & USEFUL WEBSITES

Biology

- Ball, J.W. and Bindler, R.C. (2004) *Paediatric Nursing*. 3rd edition. New Jersey: Prentice Hall.
- Barber, P and Robertson, D (2009) *Essentials of Pharmacology for Nurses*, London: McGraw-Hill Education.
- British National Formulary (2008) *British National Formulary for Children*. London: BMJ Publishers.
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- Comer, R.J. (2008) *Fundamentals of Abnormal Psychology* 5th ed. New York: Worth Publishers

- Costello I., Long PF, Wong K et al (2007) *Paediatric Drug Handling*. London: Pharmaceutical Press.
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- Improve the Use of Medicines in Children. *Child Care Health and Development* 30 (6): 647 – 655.
- Chamley, C.A., Carson, P., Randall, D. et al (2005) *Developmental Anatomy and Physiology of Children: a Practical Approach*. Edinburgh: Elsevier.
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- Fuhrman, B.P. and Zimmerman, J.J. (2006) *Paediatric Critical Care*. 3rd edition. St Louis: Mosby.
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- Marieb, E.N. and Hoehn, K. (2010) *Human Anatomy and Physiology*. 8th ed. London: Pearson Benjamin Cummings
- Martini, F.H. (2009) *Fundamentals of Anatomy and Physiology*. 8th ed. London: Benjamin Cummings.
- McCance, K. and Huether, S. (2002) *Pathophysiology: the Biologic Basis for Diseases in Adults and Children*. 4th ed. St Louis: Mosby.

- Morton, P.G. Fontaine, D. Hudak, C.M. and Gallo, B.M. (eds.) (2005) *Critical Care Nursing: A Holistic Approach* 8th ed. Philadelphia: Lippincott Williams and Wilkins.
- Neil, S. and Knowles, H. (2004) *The Biology of Child Health*. Basingstoke: Palgrave Macmillan.
- Nussey, S.S. and Whitehead, S.A. (2001) *Endocrinology: an Integrated Approach*. Oxford: Bioscientific Publishers.
- NPSA (2007) *Safety in Dosages: Medication Safety in the NHS* London: NPSA
- Porth, C. (2008) *Pathophysiology: Concepts of Altered Health States*. 8th ed. Philadelphia: Lippincott Wilkins.
- Totor, G.J. Funke, B.R. and Case, C.L. (2007) *Microbiology: An Introduction*. San Francisco USA: Pearson Education.
- Seeley, R.R., Stephens, T.D. and Tate, P. (2005) *Essentials of Anatomy and Physiology*. 7th ed. Boston: McGraw Hill.
- Skirton, H. and Patch, C. (2002) *Genetics for Healthcare Professionals: a Lifestage Approach*. Oxford: Bios Publishing.
- Schechter, N.L., Berde, C.B. and Yaster, M. (2003) *Pain in Infants, Children and Adolescents*. 2nd ed. Philadelphia: Lippincott Williams and Wilkins.
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- Thompson, J.M. (1998) *Nutritional Requirements of Infants and Young People*. Oxford: Blackwell Science.
- Watt, S, (2003) The Safe Administration of Medicines to Children: Part 1. *Paediatric Nursing* 15(4) 40-43; Part II *Paediatric Nursing* 15(5) 40-44.
- Watt, S, (2003) The Safe Administration of Medicines to Children: Part II *Paediatric Nursing* 15(5) 40-44.

Key Websites:

- Department of Health NSF (Medicines Management) www.doh.gov.uk
- Royal College of Paediatrics and Child Health <http://www.rcpch.ac.uk>
- www.childgrowthfoundation.org This website contains information which will be of benefit to parents with a child who has a diagnosed or suspected growth

problem, to people who have a growth problem and their families, and to people and medical professionals with an interest.

- www.ppprofile.org.uk
- <http://www.doh.gov.uk/NSF/children.htm>
- <http://www.resus.org.uk/pages/guide.htm> Resuscitation UK Council Guidelines 2005
- <http://www.WHO.org> The World Health Organization website.
- <http://mywebpages.comcast.net/wnor/respiratorymovements.htm> The study of the thorax, with explanations and demonstration of respiratory processes.
- http://www.nao.org.uk/publications/nao_reports/9900230.Pdf National Audit Office Report on Hospital Acquired Infections.
- http://europa.eu.int/comm/health/ph_determinants/environment/PP/pp_en.htm Europe Public Health WebSite
- help@rospa.com The Royal Society for the Prevention of Accidents.
- www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/ChildrenServices/Childrenservicesinformation

Children's Nursing Practice

- Aggleton, P., Hurry, J. and Warwick, I. (eds.) (2000) *Young People and Mental Health*. Chichester: Wiley.
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- Cormack, D. (ed.) (2000) *The Research Process in Nursing*. 4th ed. Oxford: Blackwell Science
- Darbyshire, P. (1994) *Living with a sick child in hospital; the experiences of parents and nurses*. London: Chapman & Hall
- Department of Health (1999) *The National Service Framework for Mental Health. Modern Standards and Service Models*. London: DoH
- Department of Health (2000) *No Secrets: Guidance on Developing and Implementing Multi-Agency Policies and Procedures to Protect Vulnerable Adults From Abuse*. London: DoH.
- Department of Health (2001) *Safety First: Five year report of the National Confidential Inquiry into suicide & Homicide by people with mental illness*. London: DoH. www.doh.gov.uk/mentalhealth/safetyfirst
- Department of Health (2002) *National Suicide Prevention Strategy for England*. London: DoH.
- Department of Health (2003) *Essence of Care - patient-focused benchmarks for clinical governance*. London: DOH
- DoH (2004a) *National Service Framework for Children, Young People & Maternity Services*. London: Department of Health
- DoH (2004b) *Choosing Health* (Public Health White Paper). Chapter 3. London: Department of Health
- Department of Health (2004c) *The NHS Knowledge and Skills Framework (NHS KSF) and the Development Review Process*. London: DoH.
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- Graham, P., Turk, J. and Verhulst, F.C. (1999) *Child Psychiatry: a Developmental Approach*. 3rd ed. Oxford: Oxford University Press.

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- Whitehead, E. and Mason, T. (2003) *Thinking Nursing*. Berkshire: Open University Press

Websites

- Every Child Matters <http://www.everychildmatters.gov.uk/health/>
- 4 Nations Child Policy Network www.childpolicy.org.uk
- National Children's Bureau www.ncb.org.uk
- The Royal College of Paediatrics and Child Health www.rcpch.ac.uk
- Department of Health www.dh.gov.uk
- MIND www.mind.org.uk
- National institute of Clinical Excellence www.nice.org.uk
- National Patient Safety Agency www.npsa.nhs.uk
- Project Implicit <https://implicit.harvard.edu/implicit>
- Rethink <http://www.rethink.org/index.html>
- <http://bmj.bmjournals.com/archive/7072e1.htm>