

UNIVERSITY OF THE WEST INDIES

DEPARTMENT OF CHEMISTRY

TEXTBOOKS 2006/ 2007. PART I COURSES

REQ = Required; REC = Recommended; REF = Reference.

COURSE {new code}		TEXTBOOK	COORDINATORS
C06J & C06K {CHEM0901 & CHEM 0902}	REQ - REQ - REC -	Solomons & Fryhle, ORGANIC CHEMISTRY, Wiley. McMurry & Fay, CHEMISTRY, Prentice Hall. Long & Heinz, Problem Exercises for General Chemistry, Wiley.	Prof. Reese Dr. Sadler-McKnight
C10J & C10K {CHEM1901 & CHEM1902}	REQ - REQ - REQ - REC - REC - REF - REF - REF - REF -	Atkins & dePaula, THE ELEMENTS OF PHYSICAL CHEMISTRY, Oxford Univ. Press. Cotton, Wilkinson & Gaus, BASIC INORGANIC CHEMISTRY, Wiley. Solomons & Fryhle, ORGANIC CHEMISTRY, Wiley. Skoog, West, Holler & Crouch, FUNDAMENTALS OF ANALYTICAL CHEMISTRY, 8 th ed., Thomson. Sykes, A PRIMER TO MECHANISM IN ORGANIC CHEMISTRY, Longman. Furniss, Hannaford Smith & Tatchell, VOGEL'S TEXTBOOK OF PRACTICAL ORGANIC CHEMISTRY, Longman. Henderson, Mackay & Mackay, INTRODUCTION TO MODERN INORGANIC CHEMISTRY, Blackwell. Jeffery, Bassett, Mendham & Denney, VOGEL'S TEXTBOOK OF QUANTITATIVE CHEMICAL ANALYSIS, Longman. Whitten, Davis & Peck, GENERAL CHEMISTRY WITH QUALITATIVE ANALYSIS, Saunders.	Dr. Maragh Dr. Porter

REQUIRED FOR LABORATORY WORK

Laboratory Manual (\$600), Safety Goggles (\$400) Lab Coat (\$800).

New students should purchase these three items. Make the payment to the Cashier in the Bursary, take the receipt to Mrs. Cross-Gordon's office in the Chemistry Department and collect the items.

Returning students need to purchase only the Laboratory Manual; pay and collect as above.

Students are not required to purchase laboratory notebooks.

Worksheets are provided in the Laboratory Manual.

UNIVERSITY OF THE WEST INDIES
DEPARTMENT OF CHEMISTRY
TEXTBOOKS 2006/2007. PART II COURSES

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<u>COURSE</u> {new code}		<u>TEXTBOOK</u>	<u>COORDINATOR</u>
C20J {CHEM2001}	REQ - REC - REF-	Skoog, West, Holler & Crouch, FUNDAMENTALS OF ANALYTICAL CHEMISTRY, 8th ed., Thomson. Miller & Miller, STATISTICS & CHEMOMETRICS FOR ANALYTICAL CHEMISTRY, Wiley Jeffery, Bassett, Mendham & Denney, VOGEL'S TEXTBOOK OF QUANTITATIVE CHEMICAL ANALYSIS, Longman.	Greenaway
C21J {CHEM2101}	REQ - REC - REC- REC - REF- REF - REF - REF - REF - REF - REF - REF -	Cotton, Wilkinson & Gaus, BASIC INORGANIC CHEMISTRY, latest ed.,Wiley. Bochmann, ORGANOMETALLICS 1 &2, Oxford Univ. Press. Douglas, McDaniel & Alexander, CONCEPTS & MODELS OF INORGANIC CHEMISTRY, 3 rd ed., Wiley. Gerloch & Constable, TRANSITION METAL CHEMISTRY, VCH. Cotton, Wilkinson, Murillo & Bochmann, ADVANCED INORGANIC CHEMISTRY, Wiley. Greenwood & Earnshaw, CHEMISTRY OF THE ELEMENTS, Pergamon. Figgis & Hitchman, LIGAND FIELD THEORY & ITS APPLICATIONS, Wiley-VCH Jeffery, Bassett, Mendham & Denney, VOGEL'S TEXTBOOK OF QUANTITATIVE CHEMICAL ANALYSIS, Longman. Henderson, MECHANISMS OF REACTIONS AT TRANSITION METAL SITES, Oxford Univ. Press. Huheey, Keiter & Keiter, INORGANIC CHEMISTRY. PRINCIPLES OF STRUCTURE & REACTIVITY, Harper Collins. Nicholls & David, COMPLEXES & FIRST ROW TRANSITION ELEMENTS, Macmillan.	Lancashire

HARD COVER NOTEBOOKS ARE REQUIRED FOR LABORATORY REPORTS

<u>COURSE</u> {new code}		<u>TEXTBOOK</u>	<u>COORDINATOR</u>
C22J {CHEM2201}	REQ - REQ- REF -	Pavia, Lampman & Kriz, INTRODUCTION TO SPECTROSCOPY, Saunders. Solomons & Fryhle, ORGANIC CHEMISTRY, Wiley. Furniss, Hannaford, Smith & Tatchell, VOGEL'S TEXTBOOK OF PRACTICAL ORGANIC CHEMISTRY, Longman.	Jacobs
C23J {CHEM2301}	REQ - REC - REC - REF -	Atkins, PHYSICAL CHEMISTRY, Oxford Univ. Press. Shaw, INTRODUCTION TO COLLOID & SURFACE CHEMISTRY, Butterworth Heinemann. Young and Lovell, INTRODUCTION TO POLYMERS, Chapman & Hall. Moore, PHYSICAL CHEMISTRY, Longman.	Ellis
C30J {CHEM3001}	REQ - REC - REC - REF- REF -	Skoog, West, Holler & Crouch, FUNDAMENTALS OF ANALYTICAL CHEMISTRY, 8th ed., Thomson. Harris, QUANTITATIVE CHEMICAL ANALYSIS, 6 th edition, Freeman Miller & Miller, STATISTICS & CHEMOMETRICS FOR ANALYTICAL CHEMISTRY, Wiley Skoog, Holler & Nieman, PRINCIPLES OF INSTRUMENTAL ANALYSIS, Saunders. Jeffery, Bassett, Mendham & Denney, VOGEL'S TEXTBOOK OF QUANTITATIVE CHEMICAL ANALYSIS, Longman.	Greenaway

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<u>COURSE</u> {new code}		<u>TEXTBOOK</u>	<u>COORDINATOR</u>
C31J {CHEM3101}	<p>REQ - Vincent, MOLECULAR SYMMETRY & GROUP THEORY, Wiley.</p> <p>REC - Cotton, Wilkinson, Murillo & Bochmann, ADVANCED INORGANIC CHEMISTRY, Wiley.</p> <p>REC - Greenwood & Earnshaw, CHEMISTRY OF THE ELEMENTS, Pergamon, 1984.</p> <p>REC - Douglas, McDaniel & Alexander, CONCEPTS & MODELS OF INORGANIC CHEMISTRY, Wiley.</p> <p>REF - Bishop, GROUP THEORY AND CHEMISTRY, Dover Publications</p> <p>REF - Huheey, Keiter & Keiter, INORGANIC CHEMISTRY. PRINCIPLES OF STRUCTURE & REACTIVITY, Harper Collins.</p>	Bakir	
C32J {CHEM3201}	<p>REQ - Mackie, Smith & Aitken, GUIDEBOOK TO ORGANIC SYNTHESIS, Longman.</p> <p>REQ - Pavia, Lampman & Kriz, INTRODUCTION TO SPECTROSCOPY, Saunders.</p> <p>REQ - Solomons & Fryhle, ORGANIC CHEMISTRY, Wiley.</p> <p>REC - Furniss, Hannaford Smith & Tatchell, VOGEL'S TEXTBOOK OF PRACTICAL ORGANIC CHEMISTRY, Longman.</p> <p>REC - Robinson, ORGANIC STEREOCHEMISTRY, Oxford Univ. Press.</p>	Jarrett	
C33J {CHEM3301}	<p>REQ - Atkins, PHYSICAL CHEMISTRY, Oxford Univ. Press.</p> <p>REC - Atkins, QUANTA. A HANDBOOK OF CONCEPTS, Oxford Univ. Press.</p> <p>REF - Banwell & McCash, FUNDAMENTALS OF MOLECULAR SPECTROSCOPY, McGraw Hill.</p> <p>REF - Moore, PHYSICAL CHEMISTRY, Longman.</p>	Ellis	
C31M {CHEM3102} (Metal Ions)	<p>REQ - Burgess, IONS IN SOLUTION, Ellis Horwood.</p> <p>REC - Henderson, MECHANISMS OF REACTIONS AT TRANSITION METAL SITES, Oxford Univ. Press.</p> <p>REC - Tobe & Burgess, INORGANIC REACTION MECHANISMS, Longman.</p>	Dasgupta	

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<u>COURSE</u> {new code}		<u>TEXTBOOK</u>	<u>COORDINATOR</u>
C32K {CHEM3202} (Org. Nat. Prods.)	REQ - REQ - REQ -	Carruthers & Coldham, SOME MODERN METHODS OF ORGANIC SYNTHESIS, Cambridge Univ. Press. <u>Either</u> Mann, SECONDARY METABOLISM, 2nd ed., Oxford Univ. Press. <u>Or</u> Mann, CHEMICAL ASPECTS OF BIOSYNTHESIS, Oxford Univ. Press. Silverstein & Webster, SPECTROMETRIC IDENTIFICATION OF ORGANIC COMPOUNDS, Wiley.	Reese
C32N {CHEM3203} (Org. Chem.in Med. & Agric.)	REC - REC - REC - REF - REF - REF - REF -	Green, Hartley & West, CHEMICALS FOR CROP IMPROVEMENT & PEST MANAGEMENT, 3 rd ed., Pergamon. Korolkovas, ESSENTIALS OF MEDICINAL CHEMISTRY, 2 nd ed., Wiley. Patrick, AN INTRODUCTION TO MEDICINAL CHEMISTRY, Oxford Univ. Press. Buchel, CHEMISTRY OF PESTICIDES, Wiley. Gilchrist, HETEROCYCLIC CHEMISTRY, 3 rd ed. Addison-Wesley Publishing, 1997. Joule and Mills, HETEROCYCLIC CHEMISTRY, 4 th ed., Blackwell, 2000. Silverman, THE ORGANIC CHEMISTRY OF DRUG DESIGN AND DRUG ACTION, Academic, 1992.	Porter
C33K {CHEM3302} (Polym.)	REQ - REC - REF -	Young & Lovell, INTRODUCTION TO POLYMERS, Chapman & Hall. Cowie, POLYMERS. CHEMISTRY & PHYSICS OF MODERN MATERIALS. Blackie Academic & Professional (Chapman & Hall). East, INTRODUCTION TO POLYMER CHEMISTRY, Pergamon.	Ellis

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<u>COURSE</u> {new code}		<u>TEXTBOOK</u>	<u>COORDINATOR</u>
C33M {CHEM3303} (Props. of Matt.)	REQ - REC - REC - REF - REF -	Atkins, PHYSICAL CHEMISTRY, Oxford Univ. Press. Atkins, MOLECULAR QUANTUM MECHANICS, Oxford Univ.Press. Shaw & Lovell, COLLOID & SURFACE CHEMISTRY, Butterworths. Adamson & Gast, PHYSICAL CHEMISTRY OF SURFACES, 6th ed., Wiley. Cartmell & Fowles, VALENCY & MOLECULAR STRUCTURE, Butterworths.	Mulder
C25J {CHEM2501} (Biotech in Chem. & Food Inds.)	REQ - REC - REF - REF - REF - REF - REF -	Ratledge & Kristiansen, BASIC BIOTECHNOLOGY, CUP. Marriot, PRINCIPLES OF FOOD SANITATION, 4th ed., Aspen. Crueger & Crueger, BIOTECHNOLOGY. A TEXTBOOK OF INDUSTRIAL MICROBIOLOGY, 2nd ed., Sinauer Assoc. Inc.. Frazier & Westhoff, FOOD MICROBIOLOGY, 4th ed., Tata McGraw-Hill. Prave, Faust, Sittig & Sukatsch (eds.), FUNDAMENTALS OF BIOTECHNOLOGY, VCH. Primrose, MOLECULAR BIOTECHNOLOGY, Blackwell Scientific Publications. Smith, BIOTECHNOLOGY PRINCIPLES, Van Nostrand Reinhold, UK. Stanbury, Whitaker & Hall, PRINCIPLES OF FERMENTATION TECHNOLOGY, 2nd ed., Pergamon.	Minott-Kates
C34J {CHEM3401} (Proj. Eval. & Mgmt.)	REF - REF - REF - REF - REF - REF - REF - REF - REF -	Batty, AN INTRODUCTION TO COST & MANAGEMENT ACCOUNTING, Heinemann. Bernstein, ANALYSIS OF FINANCIAL STATEMENTS, Business One Irwin, Holmwood, Illinois. Douglas, MANAGERIAL ECONOMICS. ANALYSIS & STRATEGY, Prentice Hall. Horngren & Sundew, INTRODUCTION TO MANAGEMENT ACCOUNTING, Prentice Hall. Musselman & Hughes, INTRODUCTION TO MODERN BUSINESS: ANALYSIS & INTERPRETATION, Prentice Hall. Resnick, PROCESS ANALYSIS & DESIGN FOR CHEMICAL ENGINEERS, McGraw-Hill. Statistical Institute of Jamaica, CONSUMER PRICE INDEX, Statin Pubs., Latest edition. Statistical Instute of Jamaica, NATIONAL INCOME AND PRODUCT, Statin Pubs., Latest edition. Thompson, ECONOMICS OF THE FIRM: THEORY & PRACTICE, Prentice Hall Int'l ed..	Coley

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<u>COURSE</u> {new code}		<u>TEXTBOOK</u>	<u>COORDINATOR</u>
C34Q {CHEM3403} (Chem. Proc. Princp.)	REQ - REF - REF - REF - REF - REF -	McCabe, Smith & Harriott, UNIT OPERATIONS OF CHEMICAL ENGINEERING, McGraw-Hill. Badger & Banchero, INTRODUCTION TO CHEMICAL ENGINEERING, McGraw-Hill. Coulson & Richardson, CHEMICAL ENGINEERING, Vols. 1-6, Pergamon. Denbigh & Turner, CHEMICAL REACTOR THEORY. AN INTRODUCTION, Cambridge Univ. Press. Fogler, ELEMENTS OF CHEMICAL REACTION ENGINEERING, Prentice Hall. Himmelblau, BASIC PRINCIPLES & CALCULATIONS OF CHEMICAL ENGINEERING, Prentice Hall. Hsieh, ENGINEERING THERMODYNAMICS, Prentice-Hall.	Ivwurie
C35Q {CHEM3501} (Food & Flav. Chem.)	REQ - REC - REC - REF- REF - REF - REF - REF -	Coultate, FOOD. THE CHEMISTRY OF ITS COMPONENTS, latest ed., Royal Society of Chem.. deMan, PRINCIPLES OF FOOD CHEMISTRY, latest ed., Aspen. Fennema, FOOD CHEMISTRY, latest ed., Marcel Dekker. Eskin, BIOCHEMISTRY OF FOODS, Academic. Fox and Cameron, FOOD SCIENCE, NUTRITION & HEALTH, Edward Arnold. Guthrie & Picciano, HUMAN NUTRITION, latest ed., W. C. Brown. Nielsen, FOOD ANALYSIS, Kluwer Academic/Plenum. Wong, MECHANISM AND THEORY IN FOOD CHEMISTRY, Von Nostrand Reinhold.	Minott-Kates

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<u>COURSE</u> {new code}		<u>TEXTBOOK</u>	<u>COORDINATOR</u>
C25P {CHEM2502} (Food Proc. Techs.)	REQ - REC - REC - REC - REF - REF -	Fellowes, FOOD PROCESSING TECHNOLOGY, VCH. Coultate, FOOD. THE CHEMISTRY OF ITS COMPONENTS, latest ed., Royal Society of Chem.. Heldman & Hartel, PRINCIPLES OF FOOD PROCESSING, 1999, Aspen. Potter & Hotchkiss, FOOD SCIENCE, latest ed., Chapman & Hall. Food Processors Institute, CANNED FOODS, The Food Processors Institute. Frazier & Westhoff, FOOD MICROBIOLOGY, latest ed., Tata McGraw-Hill.	Bowen
C26Q {CHEM2601} (Environ. Chem.)	REQ - REC - REF - REF - REF - REF - REF - REF - REF -	Andrews, Brimblecombe, Jickells & Liss, INTRODUCTION TO ENVIRONMENTAL CHEMISTRY, Blackwell. Brimblecombe, AIR COMPOSITION & CHEMISTRY, Cambridge Univ. Press. Evans, AN INTRODUCTION TO METALLIC CORROSION, Edward Arnold. Jeffery, Bassett, Mendham & Denney, VOGEL'S TEXTBOOK OF QUANTITATIVE CHEMICAL ANALYSIS, Longman. Krauskopf & Bird, INTRODUCTION TO GEOCHEMISTRY, McGraw-Hill. Manahan, ENVIRONMENTAL CHEMISTRY, latest ed., CRC Press. Scully, FUNDAMENTALS OF CORROSION, Pergamon Stumm & Morgan, AQUATIC CHEMISTRY, Wiley Interscience Uhlig, CORROSION & CORROSION CONTROL, 3 rd ed., Wiley.	Greenaway

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