

UNIVERSITY OF THE WEST INDIES

DEPARTMENT OF CHEMISTRY

TEXTBOOKS 2002/ 2003. PART I COURSES

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

COURSE		TEXTBOOK	
C06J & C06K	REQ -	Solomons & Fryhle, ORGANIC CHEMISTRY, 7th ed., Wiley.	Dr. McKnight & Dr. Reese
	REQ -	McMurry & Fay, CHEMISTRY, Prentice Hall.	
	REC -	Long & Heinz, Problem Exercises for General Chemistry, Wiley.	
C10J & C10K	REQ -	Atkins, THE ELEMENTS OF PHYSICAL CHEMISTRY, Oxford Univ. Press.	Dr. Maragh & Dr. Dixon
	REQ -	Cotton, Wilkinson & Gaus, BASIC INORGANIC CHEMISTRY, 3rd ed.,Wiley.	
	REQ -	Solomons & Fryhle, ORGANIC CHEMISTRY, 7th ed., Wiley.	
	REC -	Jeffery, Bassett, Mendham & Denney, VOGEL'S TEXTBOOK OF QUANTITATIVE CHEMICAL ANALYSIS, 5 th ed., Longman/ELBS.	
	REC -	Sykes, A PRIMER TO MECHANISM IN ORGANIC CHEMISTRY, Longman.	
	REF -	Furniss, Hannaford Smith & Tatchell, VOGEL'S TEXTBOOK OF PRACTICAL ORGANIC CHEMISTRY, 5 th ed., Longman/ELBS.	
	REF -	Henderson, Mackay & Mackay, INTRODUCTION TO MODERN INORGANIC CHEMISTRY, Blackwell.	
REF -	Whitten, Davis & Peck, GENERAL CHEMISTRY WITH QUALITATIVE ANALYSIS, Saunders.		

REQUIRED FOR LABORATORY WORK

Laboratory Manual (\$450), Safety Goggles (\$250).

New students should purchase these two items. Make payment to the Cashier in the Bursary, take the receipt to the Stores in the Chemistry Department and collect the items. Returning students need 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 2002/2003. PART II COURSES

REQ = Required; REC = Recommended; REF = Reference

COURSE		TEXTBOOK	COORDINATOR
C20J	<p>REQ - Skoog & Douglas, FUNDAMENTALS OF ANALYTICAL CHEMISTRY, latest ed., Saunders.</p> <p>REQ - Jeffery, Bassett, Mendham & Denney, VOGEL'S TEXTBOOK OF QUANTITATIVE CHEMICAL ANALYSIS, latest ed., Longman/ELBS.</p> <p>REC - Miller & Miller, STATISTICS FOR ANALYTICAL CHEMISTRY, latest ed., Wiley</p>		Coley
C21J	<p>REQ - Cotton, Wilkinson & Gaus, BASIC INORGANIC CHEMISTRY, 3rd ed., Wiley.</p> <p>REQ - Greenwood & Earnshaw, CHEMISTRY OF THE ELEMENTS, Pergamon.</p> <p>REQ - Nicholls & David, COMPLEXES & FIRST ROW TRANSITION ELEMENTS, Macmillan.</p> <p>REC - Bochmann, ORGANOMETALLICS 1 & 2, Oxford Univ. Press.</p> <p>REC - Douglas, McDaniel & Alexander, CONCEPTS & MODELS OF INORGANIC CHEMISTRY, Wiley.</p> <p>REC - Jeffery, Bassett, Mendham & Denney, VOGEL'S TEXTBOOK OF QUANTITATIVE CHEMICAL ANALYSIS, 5th ed., Longman/ELBS.</p> <p>REF - Cotton, Wilkinson Murillo & Bochmann, ADVANCED INORGANIC CHEMISTRY, 6th ed., Wiley.</p> <p>REF - Figgis & Hitchman, LIGAND FIELD THEORY & ITS APPLICATIONS, Wiley.</p> <p>REF - Henderson, MECHANISMS OF REACTIONS AT TRANSITION METAL SITES, Oxford Univ. Press.</p> <p>REF - Huheey, Keiter & Keiter, INORGANIC CHEMISTRY. PRINCIPLES OF STRUCTURE & REACTIVITY, Harper Collins.</p>		Lancashire
C22J	<p>REQ - Solomons & Fryhle, ORGANIC CHEMISTRY, 7th ed., Wiley.</p> <p>REQ - Kemp, ORGANIC SPECTROSCOPY, 3rd ed., Macmillan.</p> <p>REC - Furniss, Hannaford, Smith & Tatchell, VOGEL'S TEXTBOOK OF PRACTICAL ORGANIC CHEMISTRY, 5th ed., Longman/ELBS.</p> <p>REC - Sykes, A GUIDEBOOK TO MECHANISM IN ORGANIC CHEMISTRY, 6th ed., Longman.</p>		Jacobs

HARD COVER NOTEBOOKS ARE REQUIRED FOR LABORATORY REPORTS

<u>COURSE</u>		<u>TEXTBOOK</u>	<u>COORDINATOR</u>
C23J	<p>REQ - Atkins, PHYSICAL CHEMISTRY, Oxford Univ. Press.</p> <p>REC - Moore, PHYSICAL CHEMISTRY, Longman.</p> <p>REC - Shaw, INTRODUCTION TO COLLOID & SURFACE CHEMISTRY, 4th ed., Butterworth Heinemann.</p> <p>REC - Young and Lovell, INTRODUCTION TO POLYMERS, Chapman & Hall.</p>		Pinnock
C30J	<p>REQ - Skoog & Douglas, FUNDAMENTALS OF ANALYTICAL CHEMISTRY, latest ed., Saunders.</p> <p>REQ - Jeffery, Bassett, Mendham & Denney, VOGEL'S TEXTBOOK OF QUANTITATIVE CHEMICAL ANALYSIS, latest ed., Longman/ELBS.</p> <p>REC - Miller & Miller, STATISTICS FOR ANALYTICAL CHEMISTRY, latest ed., Wiley</p> <p>REC - Skoog & Leary, INSTRUMENTAL ANALYSIS, Saunders.</p>		Coley
C31J	<p>REQ- <u>Either</u> Cotton, Wilkinson Murillo & Bochmann, ADVANCED INORGANIC CHEMISTRY, 6th ed., Wiley.</p> <p><u>or</u> Greenwood & Earnshaw, CHEMISTRY OF THE ELEMENTS, Pergamon.</p> <p>REQ - Vincent, MOLECULAR SYMMETRY & GROUP THEORY, Wiley, 2001.</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>		Dixon
C32J	<p>REQ - Carruthers, SOME MODERN METHODS OF ORGANIC SYNTHESIS, 3rd ed., Cambridge Univ. Press.</p> <p>REQ - Kemp, ORGANIC SPECTROSCOPY, 3rd ed., Macmillan.</p> <p>REQ - Solomons & Fryhle, ORGANIC CHEMISTRY, 7th ed., Wiley.</p> <p>REQ - Sykes, A GUIDEBOOK TO MECHANISM IN ORGANIC CHEMISTRY, 6th ed., Longman.</p> <p>REC - Robinson, ORGANIC STEROCHEMISTRY, Oxford Univ. Press.</p>		Porter

HARD COVER NOTEBOOKS ARE REQUIRED FOR LABORATORY REPORTS

<u>COURSE</u>		<u>TEXTBOOK</u>	<u>COORDINATOR</u>
C33J	REQ - REC - REC -	Atkins, PHYSICAL CHEMISTRY, Oxford Univ. Press. Atkins, QUANTA. A HANDBOOK OF CONCEPTS, Oxford Univ. Press. Moore, PHYSICAL CHEMISTRY, Longman.	Ellis
C31M (Metal Ions)	REQ - REC -	Burgess, IONS IN SOLUTION, Ellis Horwood. Henderson, MECHANISMS OF REACTIONS AT TRANSITION METAL SITES, Oxford Univ. Press.	McKnight
C31N (Adv. Mat'ls Sci.)	REQ - REQ - REC - REC - REF - REF - REF -	Gilbert & Baggott, ESSENTIALS OF MOLECULAR PHOTOCHEMISTRY, Blackwell. Smart & Moore, SOLID STATE CHEMISTRY. AN INTRODUCTION, Chapman & Hall. Anderson, Levy, Alexander & Rawlings, MATERIAL SCIENCE, Chapman & Hall. Cheetham & Day, SOLID STATE CHEMISTRY TECHNIQUES, Oxford Sci. Publications. Bruce & O'Hare, INORGANIC MATERIALS, Wiley. Ebsworth, Rankin & Craddock, STRUCTURAL METHODS IN INORGANIC CHEMISTRY, Blackwell/ELBS. Rao & Gopalkrishnan, NEW DIRECTIONS IN SOLID STATE CHEMISTRY, Cambridge Univ. Press.	Bakir
C32K (Org. Nat. Prods.)	REQ - REQ - REQ -	Carruthers, SOME MODERN METHODS OF ORGANIC SYNTHESIS, 3rd ed., 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

HARD COVER NOTEBOOKS ARE REQUIRED FOR LABORATORY REPORTS

<u>COURSE</u>		<u>TEXTBOOK</u>	<u>COORDINATOR</u>
C32N (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, 2 nd ed., Oxford Univ. Press, 2001. 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.	Jarrett
C33K (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.	Maragh
C33M (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, PHYSICAL CHEMISTRY OF SURFACES, Wiley. Cartmell & Fowles, VALENCY & MOLECULAR STRUCTURE, Butterworths.	Pinnock
C25J (Biotech in Chem. & Food Inds.)	REQ - REC - REF - REF - REF - REF - REF - REF -	Stanbury, Whitaker & Hall, PRINCIPLES OF FERMENTATION TECHNOLOGY, latest ed., Pergamon. Marriot, PRINCIPLES OF FOOD SANITATION, latest ed., Kluwer. Bu'Lock & Kristiansen, BASIC BIOTECHNOLOGY, Elsevier. Crueger & Crueger, BIOTECHNOLOGY. A TEXTBOOK OF INDUSTRIAL MICROBIOLOGY, 2 nd ed., Sinauer Assoc. Inc.. Frazier & Westhoff, FOOD MICROBIOLOGY, latest ed., Tata McGraw-Hill. Prave, Faust, Sittig & Sukatsch (eds.), FUNDAMENTALS OF BIOTECHNOLOGY, VCH. Primrose, MOLECULAR BIOTECHNOLOGY, Blackwell Scientific Publications. Smith, BIOTECHNOLOGY PRINCIPLES, Kluwer.	Minott

<u>COURSE</u>		<u>TEXTBOOK</u>	<u>COORDINATOR</u>
C34J (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 Institute of Jamaica, NATIONAL INCOME AND PRODUCT, Statin Pubs., Latest edition. Thompson, ECONOMICS OF THE FIRM: THEORY & PRACTICE, Prentice Hall Int'l ed..	Magnus
C34M (The Chem. Inds.)	REC - REC - REF - REF - REF - REF - REF - REF - REF - REF - REF -	Chenier, SURVEY OF INDUSTRIAL CHEMISTRY, Krieger, 1991. White, INTRODUCTION TO INDUSTRIAL CHEMISTRY, Wiley. Clausen & Mattson, PRINCIPLES OF INDUSTRIAL CHEMISTRY, Wiley. Jones (ed.), CHEMISTRY & INDUSTRY, Clarendon Press, Oxford. Manning, AN INTRODUCTION TO CHEMICAL INDUSTRY, Pergamon. Reiche, OUTLINE OF INDUSTRIAL ORGANIC CHEMISTRY, Butterworth. Roberts, THE CHEMISTRY OF PAPER, Royal Society of Chemistry. Shelby, INTRODUCTION TO GLASS SCIENCE & TECHNOLOGY, Royal Society of Chemistry. Stephenson, INTRODUCTION TO THE CHEMICAL PROCESS INDUSTRIES, Reinhold. Stille, INDUSTRIAL ORGANIC CHEMISTRY, Prentice Hall. Tedder, Nechvatal & Jubb, BASIC ORGANIC CHEMISTRY, PART 5, Wiley.	Coley

<u>COURSE</u>		<u>TEXTBOOK</u>	<u>COORDINATOR</u>
C34Q (Chem. Proc. Princ.)	<p>REC –</p> <p>REC –</p> <p>REF –</p> <p>REF –</p> <p>REF –</p> <p>REF –</p> <p>REF –</p> <p>REF –</p>	<p>Foust et al, PRINCIPLES OF UNIT OPERATIONS, latest ed., Wiley.</p> <p>McCabe, Smith & Harriot, UNIT OPERATIONS OF CHEMICAL ENGINEERING, latest ed., McGraw-Hill.</p> <p>Badger & Banchero, INTRODUCTION TO CHEMICAL ENGINEERING, McGraw-Hill.</p> <p>Coulson & Richardson, CHEMICAL ENGINEERING, Vols. 1-6, Pergamon.</p> <p>Denbigh & Turner, CHEMICAL REACTOR THEORY. AN INTRODUCTION, Cambridge Univ. Press.</p> <p>Fogler, ELEMENTS OF CHEMICAL REACTION ENGINEERING, Prentice Hall.</p> <p>Himmelblau, BASIC PRINCIPLES & CALCULATIONS OF CHEMICAL ENGINEERING, latest ed., Prentice Hall.</p> <p>Hsieh, ENGINEERING THERMODYNAMICS, Prentice-Hall.</p>	Minott
C35Q (Food & Flav. Chem.)	<p>REQ -</p> <p>REC –</p> <p>REC –</p> <p>REC –</p> <p>REF –</p> <p>REF –</p> <p>REF –</p> <p>REF –</p> <p>REF -</p>	<p>Coultate, FOOD. THE CHEMISTRY OF ITS COMPONENTS, latest ed., Royal Society of Chem..</p> <p>deMan, PRINCIPLES OF FOOD CHEMISTRY, latest ed., Kluwer.</p> <p>Fennema, FOOD CHEMISTRY, latest ed., Marcel Dekker.</p> <p>Fox and Cameron, FOOD SCIENCE, NUTRITION & HEALTH, latest ed., Edward Arnold.</p> <p>Eskin, BIOCHEMISTRY OF FOODS, Academic.</p> <p>Guthrie & Picciano, HUMAN NUTRITION, latest ed., Mosby.</p> <p>Kirk & Sawyer (eds.), PEARSON'S COMPOSITION & ANALYSIS OF FOODS, Longman.</p> <p>Nielsen, FOOD ANALYSIS, latest ed., Kluwer.</p> <p>Wong, MECHANISM AND THEORY IN FOOD CHEMISTRY, Kluwer.</p>	Minott

HARD COVER NOTEBOOKS ARE REQUIRED FOR LABORATORY REPORTS

<u>COURSE</u>		<u>TEXTBOOK</u>	<u>COORDINATOR</u>
C25P (Food Proc. Techs.)	<p>REQ - Potter & Hotchkiss, FOOD SCIENCE, latest ed., Chapman & Hall.</p> <p>REC - Coultate, FOOD. THE CHEMISTRY OF ITS COMPONENTS, latest ed., Royal Society of Chem..</p> <p>REC - Frazier & Westhoff, FOOD MICROBIOLOGY, latest ed., Tata McGraw-Hill.</p> <p>REC - Heldman & Hartel, PRINCIPLES OF FOOD PROCESSING, 1999, Kluwer.</p> <p>REF - Fellows, FOOD PROCESSING TECHNOLOGY, VCH.</p> <p>REF - Food Processors Institute, CANNED FOODS, The Food Processors Institute.</p>	Minott	
C26Q (Environ. Chem.)	<p>REQ - Jeffery, Bassett, Mendham & Denney, VOGEL'S TEXTBOOK OF QUANTITATIVE CHEMICAL ANALYSIS, 5th ed., Longman/ELBS.</p> <p>REQ - Andrews, Brimblecombe, Jickells & Liss, INTRODUCTION TO ENVIRONMENTAL CHEMISTRY, Blackwell.</p> <p>REC - Brimblecombe, AIR COMPOSITION & CHEMISTRY, Cambridge Univ. Press.</p> <p>REC - Krauskopf & Bird, INTRODUCTION TO GEOCHEMISTRY, McGraw-Hill.</p> <p>REC - Manahan, ENVIRONMENTAL CHEMISTRY, 4th ed., Lewis Publishers Inc..</p> <p>REF- Evans, AN INTRODUCTION TO METALLIC CORROSION, Edward Arnold.</p> <p>REF - Harrison, de Mora, Rapsomanikis & Johnson, INTRODUCTORY CHEMISTRY FOR THE ENVIRONMENTAL SCIENCES, Cambridge Univ. Press.</p> <p>REF - Scully, FUNDAMENTALS OF CORROSION, Pergamon</p> <p>REF - Uhlig, CORROSION & CORROSION CONTROL, Wiley.</p>	Pinnock	

HARD COVER NOTEBOOKS ARE REQUIRED FOR LABORATORY REPORTS

DEPARTMENT OF CHEMISTRY

TEXTBOOKS

POSTGRADUATE COURSES

REQ = Required; REC = Recommended; REF = Reference

<u>COURSE</u>		<u>TEXTBOOK</u>	<u>COORDINATOR</u>
C60J (Synthesis)	REQ - REC- REC-	Warren, THE DISCONNECTION APPROACH, Wiley Campbell, CATALYSIS AT SURFACES, Chapman & Hall Cheetham & Day, SOLID STATE CHEMISTRY TECHNIQUES, Oxford Univ. Press. Freeman, ed., HIGH RESOLUTION GAS CHROMATOGRAPHY, Hewlett Packard.	Jackson
C60K (Reaction Mechs)	REQ- REQ- REC- REC- REC- REC-	Burgess, METAL IONS IN SOLUTION, Ellis Horwood Carey & Sundberg, ADVANCED ORGANIC CHEMISTRY, Part A, Plenum. Crow, PRINCIPLES & APPLICATIONS OF ELECTROCHEMISTRY, Chapman & Hall. Isaacs, PHYSICAL ORGANIC CHEMISTRY, Longman Lowry & Richards, MECHANISM & THEORY IN ORGANIC CHEMISTRY, Harper & Row. Wilkins, KINETICS & MECHANISMS OF REACTIONS OF TRANSITION METAL COMPLEXES, Springer.	Mulder
C60L (Spectrosc.)	REQ- REC- REC- REF-	Sanders & Hunter, MODERN NMR SPECTROSCOPY, A GUIDE FOR CHEMISTS, Oxford Univ. Press. Cheetam & Day, SOLID STATE CHEMISTRY TECHNIQUES, Oxford Univ. Press. Glusker, Lewis & Rossi, CRYSTAL STRUCTURE ANALYSIS FOR CHEMISTS AND BIOLOGISTS, VCH. Hollas, MODERN SPECTROSCOPY, Wiley.	Bakir
C60M (Research Methods)	REQ- REQ- REC-	Skoog & West, PRINCIPLES OF INSTRUMENTAL ANALYSIS, Saunders. SAFETY MANUAL, Chemistry Department, UWI. Harris, QUANTITATIVE CHEMICAL ANALYSIS, Freeman	Lancashire

