

**SCHOOL OF BIOLOGICAL SCIENCES AND APPLIED CHEMISTRY**  
**BOOK LIST - WINTER SEMESTER 2014**  
 All First/second Semester BSAC Programs

Subject Code	Subject Name	Required Text(s)
BIO 173	Biology	Cell Biology Volume 1, 13 <sup>th</sup> edition textbook + Aplia with ebook + Clicker Starr, Taggart, Evers ISBN# 0176560971 <p style="text-align: center;"><b>OR</b></p> Cell Biology Volume 1, 13th edition textbook + Aplia with ebook Starr, Taggart, Evers, ISBN# 017656098X
CHM 173	Chemistry	Chemistry Whitten Nelson ISBN 0-176-5757-4X New)  WHMIS – What you need to know, latest edition Office of Environmental Health and Safety University of Toronto ISBN 00012 96877  Chemistry Laboratory Notebook Chemical Education Resources Inc. ISBN 0-87540-247-X
MTH 173	Mathematics	<p><b>Package 1:</b></p> Technical Math 2 <sup>nd</sup> Canadian Edition by Calter text, Herzog text Calter ebook, Herzog ebook, Wiley PLUS (in package) Paul A Calter & David Alan Herzog, Wiley Publishing ISBN 9780470159491 <p style="text-align: center;"><b>OR</b></p> <p><b>Package 2:</b></p> Herzog text Technical Math 2 <sup>nd</sup> Canadian Edition by Calter ebook Herzog ebook, Wiley PLUS with (in package) Paul A Calter & David Alan Herzog, Wiley Publishing

		ISBN 9780470159507
MTH148	Mathematics	<p><b>Package 1:</b>  Technical Math 2<sup>nd</sup> Canadian Edition by Calter text, Herzog text  Calter ebook, Herzog ebook, Wiley PLUS (in package)  Paul A Calter &amp; David Alan Herzog, Wiley Publishing  ISBN 9780470159491</p> <p><b>OR</b></p> <p><b>Package 2:</b>  Herzog text  Technical Math 2<sup>nd</sup> Canadian Edition by Calter ebook  Herzog ebook, Wiley PLUS with (in package)  Paul A Calter &amp; David Alan Herzog, Wiley Publishing  ISBN 9780470159507</p>

Subject Code	Subject Name	Required Text(s)
ACA 273	Advanced Computer Applications	N/A
BIO 273	Biology	<p>Cell Biology Volume 1, 13<sup>th</sup> edition textbook + Aplia with ebook + Clicker  Starr, Taggart, Evers  ISBN# 0176560971</p> <p style="text-align: center;"><b>OR</b></p> <p>Cell Biology Volume 1, 13th edition textbook + Aplia with ebook  Starr, Taggart, Evers,  ISBN# 017656098X</p>
CHM 273	Chemistry	<p>Chemistry  Whitten  Nelson  ISBN 0-176-55359-2</p> <p>WHMIS – What you need to know, latest edition  Office of Environmental Health and Safety  University of Toronto  ISBN 00012 96877</p> <p>Chemistry Laboratory Notebook  Chemical Education Resources Inc.  ISBN 0-87540-247-X</p>
MTH 273	Mathematics	<p><b>Package 1:</b>  Technical Math 2<sup>nd</sup> Canadian Edition by Calter text, Herzog text  Calter ebook, Herzog ebook, Wiley PLUS (in package)  Paul A Calter &amp; David Alan Herzog, Wiley Publishing  ISBN 9780470159491</p> <p style="text-align: center;"><b>OR</b></p> <p><b>Package 2:</b>  Herzog text  Technical Math 2<sup>nd</sup> Canadian Edition by Calter ebook  Herzog ebook, Wiley PLUS with (in package)  Paul A Calter &amp; David Alan Herzog, Wiley Publishing</p>

		ISBN 9780470159507
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CHEMICAL LABORATORY TECHNICIAN (CLT)

Winter 141 133

Subject Code	Subject Name	Required Text(s)
Third Semester		
AIC372	Applied Inorganic Chemistry	N/A
CHO 372	Organic Chemistry	Fundamentals of Organic Chemistry with OWL, 7 <sup>th</sup> edition Author: McMurry Publisher: Nelson Education Inc. The textbook and OWL is required
MBG 372	Microbiology	Microbiology - An Introduction, G. Tortora Pearson ISBN 0-558-28188-5
Fourth Semester		
BIC 472	Biochemistry	Organic and Biochemistry for Today + Survival Guide (custom package) ISBN 978-1-111-18918-1 Seager, S.L.; Slabaugh, M.R. Thomson/Brooks/Cole
IMB 472	Industrial Microbiology	N/A
ITM 472	Instrumental Methods	N/A
IOC 472	Analytical Chemistry	Analytical Chemistry IOC472 Lecture Notes/ Lab Manual, September 2013 T. Porumb Seneca College
IPM472	Introduction to Pharmaceutical Manufacturing	N/A
PHY453	Physics	Inquiry into Physics W/ Enhanced webassign ISBN: 1133803075 Ostdiek Nelson Canada

## BIOTECHNOLOGY TECHNOLOGIST – RESEARCH (BTR)

Subject Code	Subject Name	Required Text(s)
Fourth Semester		
BIT 473	Biotechniques	Biochemistry, (Custom) Garret & Grisham Nelson Education ISBN 1133638708
CHO 473	Organic Chemistry	Laboratory Manual for Organic Chemistry CHO473 (with HPLC) 2009 H.C. Stynes, G. Hobson Seneca College
CPG453	Computer Applications	N/A
STA373	Statistics	STAT, Student educatin Johnson / Kuby Nelson ISBN 978-053-873841-5
OCC433	Occupational Health and Chemistry	N/A
FIFTH/Sixth Semester		
BPH633	Biopharmaceuticals	N/A
FMB573	Food Microbiology	N/A
IMU 673	Immunology	IMU673 Immunology Lab Manual 2009 Linda Facchini Seneca College
TIC673	Tissue Culture	Culture of Animal Cells: A Manual of Basic Techniques 6 <sup>TH</sup> Ed., ISBN 97804705218129 R. Ian Freshney, Wiley-Liss (OPTIONAL)  Techniques in Tissue Culture TIC673, January 2013 Gerda Jacobs & Sherrill Archer Seneca College
VIR 673	Virology	Current Issues in Microbiology Vol. 1 and Vol. 2 Pearson ISBN 0-137-00827-9
BNF573	Bioinformatics	N/A
ANH573	Anatomy & Histology	Guide to Histological Techniques, Sept Ed. Dan Phillips, Seneca College

## CHEMICAL ENGINEERING TECHNOLOGY (CHY)

Subject Code	Subject Name	Required Text(s)
Fifth Semester		
CMI 533	Chemical Instrumentation	N/A
MTR 533	Material Science	N/A
CNG533	Chemical Engineering I	N/A
EII 533	Environmental Impact of Industrial Processes	Environmental Impact of Process Industries Lab Manual Brian Clark Seneca College
ECI533	Electronics for Chemical Instrumentation	N/A

## CHEMICAL LABORATORY TECHNOLOGY (PHARMACEUTICAL) (CLP)

Subject Code	Subject Name	Required Text(s)
Fifth Semester		
PHA533	Advanced Pharmaceutical Analysis	Advanced Pharmaceutical Analysis, PHA 533, 2013 ED Courtney Henry Seneca College
CMI 533	Chemical Instrumentation	N/A
PHT533	Pharmacology & Applied Toxicology	Lippincott's Illustrated Review Pharmacology, 5th Ed. Howland, Mycek, Harvey Chample Lippincott Williams & Wilkins ISBN 978-1-45111-314-3 (optional)
PAC633	Pharmaceutical Organic Chemistry	Laboratory Manual for Pharmaceutical Organic Chemistry 2013 edition Geetha Hobson Seneca College  Lecture Notes for PAC633 2013 edition Geetha Hobson Seneca College

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PHARMACEUTICAL REGULATORY AFFAIRS AND QUALITY OPERATIONS

Subject Code	Subject Name	Required Text(s)
Semester One		
PBB 814	Biotechnology and Biopharmaceuticals	N/A
PFM 714	Product Formulation and Manufacturing	N/A
PQA 711	Introduction to Quality Assurance	N/A
PRA 700	Introduction to Pharmaceutical Regulatory Affairs	Canadian Food & Drugs Acts and Regulations printed copy 2012
TWC 713	Technical Writing and Communication I	N/A
Semester Two		
IRA 815	International Regulatory Affairs and Harmonization	N/A
PEC 715	Pharmacoeconomics	N/A
PQA 811	Quality Assurance II	N/A
PRA 800	Regulatory Affairs II	N/A
PCR901	Introduction to Clinical Research	N/A



## Bioinformatics Post-Diploma (BIF)

BIF705	Applied Statistics	N/A
BIF801	Bioinformatics II	N/A
BIF812	Concepts of Programming With Java	N/A
BIF803	Technical Communication	TBA
BIF724	Bioinformatics Programming With Perl	N/A
BIF 806	Independent Group Project	N/A

Applied Science & Technology (AST)  
 Book List - Winter 2014

Subject Code	Subject Name	Required Text
Semester 1		
MTH145	Mathematics	<p><b>Package 1:</b>            Technical Math 2<sup>nd</sup> Canadian Edition            by Calter text, Herzog text            Calter ebook, Herzog ebook, Wiley            PLUS (in package)            Paul A Calter &amp; David Alan Herzog,            Wiley Publishing            ISBN 9780470159491</p> <p style="text-align: center;"><b>OR</b></p> <p><b>Package 2:</b>            Herzog text            Technical Math 2<sup>nd</sup> Canadian Edition            by Calter ebook            Herzog ebook, Wiley PLUS with (in            package)            Paul A Calter &amp; David Alan Herzog,            Wiley Publishing            ISBN 9780470159507</p>
IST100	Interdisciplinary Science & Tech.	<p>The Sciences, 7<sup>th</sup> ed (Hard Copy text            with WileyPLUS)            James Trefil            ISBN 9781118566442</p> <p>OR            The Sciences, 7<sup>th</sup> ed WileyPLUS Stand            Alone            James Trefil            ISBN 9781118459973</p>
PSY356	Applied Psychology of Learning and Careers	N/A

**Applied Science & Technology (AST)  
Book List – Winter 2014**

Subject Code	Subject Name	Required Text
MTH146	Mathematics	<p><b>Package 1:</b>            Technical Math 2<sup>nd</sup> Canadian Edition            by Calter text, Herzog text            Calter ebook, Herzog ebook, Wiley            PLUS (in package)            Paul A Calter &amp; David Alan Herzog,            Wiley Publishing            ISBN 9780470159491</p> <p style="text-align: center;"><b>OR</b></p> <p><b>Package 2:</b>            Herzog text            Technical Math 2<sup>nd</sup> Canadian Edition            by Calter ebook            Herzog ebook, Wiley PLUS with (in            package)            Paul A Calter &amp; David Alan Herzog,            Wiley Publishing            ISBN 9780470159507</p>
IST200	Interdisciplinary Science & Tech.	<p>The Sciences, 7<sup>th</sup> ed (Hard Copy text            with WileyPLUS)            James Trefil            ISBN 9781118566442</p> <p>OR            The Sciences, 7<sup>th</sup> ed WileyPLUS Stand            Alone            James Trefil            ISBN 9781118459973</p> <p>(Same as package used in IST100)</p>

Guelph Students

PHT533

OCC433

PHA533

PAC633

PPF633

UTS

Mathematics

Author: James Stewart

Title: Single Variable Calculus Early Transcendentals 7E (seventh Edition)

ISBN#: 978-0-538-49867-8