

Histology Training Program 2021-2022 Syllabi

Training Course	Training Session	Training Topics	Assignments & Reading
<p>Microanatomy</p> <p>STRL Histology Lab 325C Scope room and 315C Histology Research Lab</p>	<p>Visual Histology DVD's Volume 1-26</p> <p>Handouts PowerPoint Quizzes #1-#26</p> <p>Readings: Chapter 1-22 Quizzes #1-#22</p> <p>Medical Terminology handouts</p>	<p>Cognitive Objective requirements</p> <p>Psychomotor Objective Requirements</p> <p>Affective Objectives</p> <p>Vocabulary</p>	<p>Required Reading:</p> <p>Handouts provided to read prior to watching the DVD on designated microanatomy topic</p> <p><u>Atlas of Histology with Functional Correlations</u>, 13th edition, Victor P. Eroschenko, PhD., Wolters Kluwer, 2017.</p> <p>Suggested Viewing:</p> <p>https://www.youtube.com/watch?v=uBGI2BujkPQ Introduction to Anatomy & Physiology: Crash Course A&P #1</p> <p>https://www.youtube.com/watch?v=i5tR3csCWYo Tissues, Part 1: Crash Course A&P #2</p> <p>https://www.youtube.com/watch?v=LNNMYwF7dHg Histology for Beginners</p>
<p>Safety</p> <p>315C Histology Research Lab</p>	<p>Safety Lecture</p> <p>Safety Objectives</p> <p>Safety HMWK</p> <p>UT Learns Online Training Requirements</p>	<p>Cognitive Objective requirements</p> <p>Psychomotor Objective Requirements</p> <p>Affective Objectives</p> <p>Vocabulary</p>	<p>Required Reading:</p> <p>Carson, Freida L.: <u>Histotechnology, A Self-Instructional Text; 5th edition;</u> ASCP 2020. Chapter 1</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text 3rd edition;</u> ASCP 2009.</p> <p>Carson, <u>Histotechnology, A Self-Assessment Workbook,</u> ASCP Press, 1998. Chapter 4.</p> <p>Carson, <u>Histotechnology, A Self-Instructional Text, 4th edition.</u> ASCP Press, 2015, 2016. Chapter 4.</p> <p>UT Learns Course List / Quizzes (provided at time of lecture)</p>

			<p>Suggested viewing: https://www.youtube.com/watch?v=VRWRmIEHr3A Lab Techniques & Safety: Crash Course Chemistry #21</p>
<p>Instrumentation</p> <p>315C Histology Research Lab</p>	<p>Instrumentation Lecture</p> <p>Instrumentation Lecture Objectives</p> <p>Instrumentation Lecture HMWK</p>	<p>Cognitive Objective requirements</p> <p>Psychomotor Objective Requirements</p> <p>Affective Objectives</p> <p>Vocabulary</p>	<p>Required Reading: Carson, Freida L: <u>Histotechnology, A Self-Instructional Text 5th edition</u>; ASCP ch.2, 2020</p> <p>Sheehan/Hrapchak, <u>Theory and Practice of Histotechnology</u>, Mosby, Ch. 1, 1973</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text</u>; ASCP ch.2, 2009</p> <p>Carson, Freida L: <u>Histotechnology Teaching Slide Set</u>; ASCP, Slides #29-53, 1993</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text</u>; ASCP ch.3, 2015</p> <p>Brown, Richard: <u>Histologic Preparations, Common Problems and Their Solutions</u>, Chapter 1, p. 19, CAP, 2009</p> <p>Sheehan/Hrapchak, <u>Theory and Practice of Histotechnology</u>, Second Edition, Mosby, 1980, Chapter 23, pp.387-392.</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text</u>; ASCP ch.2, 2009.</p> <p>Suggested Viewing: https://www.youtube.com/watch?v=Nab97hfUVPc Tissue-Tek Embedding Center - Embedding Techniques</p>
<p>Laboratory Mathematics & Solution Preparation</p>	<p>Solution Prep Lecture</p>	<p>Cognitive Objective requirements</p>	<p>Required Reading: Carson, Freida L: <u>Histotechnology, A Self-Instructional Text 5th edition</u>; ASCP chapter 3 pp. 46-54</p>

<p>315C Histology Research Lab</p>	<p>Solution Prep PowerPoint</p> <p>Solution Prep Lecture Objectives</p> <p>Solution Prep Lecture HMWK</p>	<p>Psychomotor Objective Requirements</p> <p>Affective Objectives</p> <p>Vocabulary</p> <p>Learning Activities</p>	<p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text</u>; ASCP ch.5, pp. 93-102, 2009.</p> <p>Sheehan/Hrapchak, <u>Theory and Practice of Histotechnology</u>, Second Edition, Mosby, 1980, Chapter 20, pp. 347-357 and Chapter 23, pp. 384-392.</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text</u>; ASCP ch.5, pp. 98-104, 2015.</p> <p>Suggested viewing: https://www.youtube.com/watch?v=FSyAehMdpYI The Nucleus: Crash Course Chemistry #1</p> <p>https://www.youtube.com/watch?v=VSc491HLzDo Covalent vs. Ionic bonds</p> <p>https://www.youtube.com/watch?v=A3JxpMU63s Basic Chemistry Lab Equipment</p> <p>https://drive.google.com/file/d/10drElVTSQbsSf8qiZuKSFzrS894WcpIs/view Images</p>
<p>Fixation</p> <p>315C Histology Research Lab</p>	<p>Fixation Lecture</p> <p>Fixation PowerPoint</p> <p>Fixation Lecture Objectives</p> <p>Fixation Lecture HMWK</p>	<p>Cognitive Objective requirements</p> <p>Psychomotor Objective Requirements</p> <p>Affective Objectives</p> <p>Vocabulary</p> <p>Learning Activities</p>	<p>Required Reading:</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text 5th edition</u>; ASCP chapter 4 pp. 56-83</p> <p>Sheehan/Hrapchak, <u>Theory & Practice of Histotechnology</u>, Mosby, Chap. 2, 1980.</p> <p>Carson, <u>Histotechnology, A Self-Instructional Text</u>, ASCP Press, 2009, Chap. 1, pp.1-29.</p> <p>Carson, <u>Histotechnology Teaching Slide Set</u>, ASCP, 1993, Slides 1-15.</p> <p>Carson, <u>Histotechnology, A Self-Instructional Text</u>, ASCP Press, 2016, Chap. 1, pp.2-29.</p>

			<p>Suggested:</p> <p>http://www.histology.to/fixation faq.html, <u>Frequently Asked Questions on Fixation</u></p> <p>http://members.pgonline.com/bryand/preserve/fixation.htm, <u>Stains File Fixation</u></p> <p>Suggested viewing:</p> <p>https://www.youtube.com/watch?v=FVz6Ro0OUAE</p> <p>Steps of histological study: fixation</p>
<p>Processing</p> <p>315C Histology Research Lab</p>	<p>Processing lecture</p> <p>Processing Objectives</p> <p>Processing HMWK</p>	<p>Cognitive Objective requirements</p> <p>Psychomotor Objective Requirements</p> <p>Affective Objectives</p> <p>Vocabulary</p> <p>Learning Activities</p>	<p>Required Reading:</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text 5th edition</u>; ASCP chapter 5 pp.86-104</p> <p>Sheehan/Hrapchak, <u>Theory & Practice of Histotechnology</u> Mosby, Ch. 3 & p. 86, 1973.</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text</u>; ASCP Chapter 2, 2009.</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text</u>; ASCP Chapter 2 & p. 32-34 2015.</p> <p>Sheehan/Hrapchak: <u>Theory and Practice of Histotechnology</u>, Mosby, Chapter 3, pp. 68-78.</p> <p><u>Histotechnology, a Self-Instructional Text</u>, Carson, Chapter 2, pp. 31-37. 2009.</p> <p><u>Histotechnology, a Self-Assessment Workbook</u>, Carson, pp. 7-10.</p> <p><u>Histotechnology, a Self-Instructional Text</u>, Carson, Chapter 2, pp. 36-41. 2015.</p>

			<p>Sheehan/Hrapchak, <u>Theory & Practice of Histotechnology</u>, Mosbey, Ch. 6, p.51-59, 1973.</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text</u>; ASCP 2009, pp 46-49.</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text</u>; ASCP 2015, pp 46-52.</p>
<p>Nuclear & Cytoplasmic Staining</p> <p>315C Histology Research Lab</p>	<p>Nuclear & Cytoplasmic Lecture Objectives</p> <p>Nuclear & Cytoplasmic Lecture HMWK</p>	<p>Cognitive Objective requirements</p> <p>Psychomotor Objective Requirements</p> <p>Affective Objectives</p> <p>Vocabulary</p> <p>Learning Activities</p>	<p>Required Reading:</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text 5th edition</u>; ASCP chapter 6 pp. 106-142</p> <p>Sheehan/Hrapchak, <u>Theory and Practice of Histotechnology</u>, Second Edition, Mosby, 1980, Chapter 7, pp. 118-136.</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text</u>; ASCP 1990.</p> <p>Carson, Freida L: <u>Histotechnology Teaching Slide Set</u> slides #54-73, 1997.</p> <p>Carson: <u>Histotechnology, A Self-Instructional Text</u>; ASCP 2015. Ch. 6 p. 106-109.</p> <p>Suggested Reading:</p> <p>http://www.histology.to/hemx.html <u>Histological stains FAQ - H&E Nuclear Staining</u>, September 1997.</p> <p>Suggested Viewing:</p> <p>https://www.youtube.com/watch?v=2zufQ5VdYP8 Microscope tutorial - Troubleshooting H&E stains</p>
<p>Carbohydrate & Amyloid</p>	<p>Carbohydrate & Amyloid Lecture</p>	<p>Cognitive Objective requirements</p>	<p>Required Reading:</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text 5th edition</u>; ASCP chapter 7 pp. 144-162</p>

<p>315C Histology Research Lab</p>	<p>Carbohydrate & Amyloid Lecture Objectives</p> <p>Carbohydrate & Amyloid Lecture HMWK</p>	<p>Psychomotor Objective Requirements</p> <p>Affective Objectives</p> <p>Vocabulary</p> <p>Learning Activities</p>	<p>Sheehan/Hrapchak, <u>Theory and Practice of Histotechnology</u>, Second Edition, M 1980, Chapter 9, pp. 159-179.</p> <p>Carson, Freida L: <u>Histotechnology. A Self-Instructional Text</u>; ASCP 2009.</p> <p>Carson, Freida L: <u>Histotechnology Teaching Slide Set</u>, ASCP, 1997, slides #80</p> <p>Carson, Freida L: <u>Histotechnology. A Self-Instructional Text</u>; ASCP 2015. Ch. 7, p. 138-158.</p> <p>Suggested viewing: https://www.youtube.com/watch?v=cNsyFIWzSow Carbohydrate Staining - Histology</p>
<p>Connective & Muscle Tissue</p> <p>315C Histology Research Lab</p>	<p>Connective & Muscle Lecture</p> <p>Connective & Muscle Lecture Objectives</p> <p>Connective & Muscle Lecture HMWK</p>	<p>Cognitive Objective requirements</p> <p>Psychomotor Objective Requirements</p> <p>Affective Objectives</p> <p>Vocabulary</p> <p>Learning Activities</p>	<p>Required Reading: Carson, Freida L: <u>Histotechnology. A Self-Instructional Text 5th edition</u>; ASCP chapter 8 pp. 164-190</p> <p>Sheehan/Hrapchak, <u>Theory and Practice of Histotechnology</u>, Second Edition, Mosby, 1980, Chapter 10, pp. 180-201.</p> <p>Carson, Freida L., <u>Histotechnology A Self-Instructional Text</u>, Carson, ASCP, 2009.</p> <p>Carson, Freida L., <u>Histotechnology Teaching Slide Set</u>, 1997, slides #102-130.</p> <p>Carson, <u>Histotechnology A Self-Instructional Text</u>, Carson, ASCP, 2015. Ch. 8, p. 160-188.</p> <p>Suggested Reading: http://www.Medinfo.ufl.edu/year1histo.quiz.mhoe.html, Connective Tissue Quiz</p> <p>Suggested Viewing:</p>

			https://www.youtube.com/watch?v=ul1i7y8SJfc muscle histology http: www.unomaha
Nerve 315C Histology Research Lab	Nerve Lecture Nerve Lecture Objectives Nerve Lecture HMWK	Cognitive Objective requirements Psychomotor Objective Requirements Affective Objectives Vocabulary Learning Activities	Required Reading: Carson, Freida L: <u>Histotechnology, A Self-Instructional Text 5th edition</u> ; ASCP chapter 9 pp. 192-208 Sheehan/Hrapchak, <u>Theory & Practice of Histotechnology</u> , Mosbey, Chapter 13. Carson, Freida L: <u>Histotechnology, A Self-Instructional Text</u> ; ASCP 2009, Chapter 9. Carson, Freida L.: <u>Histotechnology Teaching Slide Set</u> , 1997, slides # 131- 149. Carson, <u>Histotechnology, A Self-Instructional Text</u> ; ASCP 2015, Chapter 9 p 190-212. Suggested viewing: https://www.youtube.com/watch?v=qPix_X-9t7E The Nervous System, Part 1: Crash Course A&P #8
Microorganisms 315C Histology Research Lab	Microorganisms Lecture Microorganisms Lecture Objectives Microorganisms Lecture HMWK	Cognitive Objective requirements Psychomotor Objective Requirements Affective Objectives Vocabulary	Required Reading: Carson, Freida L: <u>Histotechnology, A Self-Instructional Text 5th edition</u> ; ASCP chapter 10 pp. 210-232 Sheehan/Hrapchak, <u>Theory & Practice of Histotechnology</u> , Mosbey, Chapter 13 Carson, Freida L: <u>Histotechnology, A Self-Instructional Text</u> ; ASCP 2009, Chapter 10. Carson, Freida L., <u>Histotechnology Teaching Slide Set</u> , 1997, slides # 150- 168.

		Learning Activities	Carson: <u>Histotechnology, A Self-Instructional Text</u> ; ASCP 2015, Chapter 10. P.214-240.
315C Histology Research Lab	<p>Pigments, Minerals & Cytoplasmic Granules</p> <p>Pigments, Minerals & Cytology Lecture</p> <p>Pigments, Minerals & Cytology Objectives</p> <p>Pigments, Minerals & Cytology HMWK</p>	<p>Cognitive Objective requirements</p> <p>Psychomotor Objective Requirements</p> <p>Affective Objectives</p> <p>Vocabulary</p> <p>Learning Activities</p>	<p>Required Reading:</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text 5th edition</u>; ASCP chapter 11 pp. 234-252</p> <p>Sheehan/Hrapchak: <u>Theory and Practice of Histotechnology</u>, Mosby, Chapter 12</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text</u>; ASCP 2009.</p> <p>Carson, Freida L.: <u>Histotechnology Teaching Slide Set</u>, ASCP, 1997, slides # 169 185. (Pigments & Minerals)</p> <p>Carson: <u>Histotechnology, A Self-Instructional Text</u>; ASCP 2015. Chapter 11 p. 242-261.</p> <p>Hood, Glenda: Pigments and Minerals in Tissue: <u>How Do They Get There and How Do We Stain Them?</u> ASCP Fall 1997 Teleconference Series.</p>
315C Histology Research Lab	<p>Immunohistochemistry</p> <p>IHC Lecture</p> <p>IHC PowerPoint</p> <p>IHC Lecture Objectives</p> <p>IHC Lecture HMWK</p>	<p>Cognitive Objective requirements</p> <p>Psychomotor Objective Requirements</p> <p>Affective Objectives</p> <p>Vocabulary</p>	<p>Required Reading:</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text 5th edition</u>; ASCP chapter 12 pp. 254-280</p> <p>Sheehan/Hrapchak, <u>Theory and Practice of Histotechnology</u>, Mosbey, pp. 319-326, 1980</p> <p>Carson, Freida L: <u>Histotechnology, A Self-Instructional Text</u>; ASCP 1990.</p> <p>Carson, Freida L: <u>Histotechnology, Teaching Slide Set</u>, ASCP, 1993.</p> <p>Suggested:</p>

		Learning Activities	NSH Self-Assessment Series #5: Immunohistochemistry, Enzyme Histochemistry, Flow Cytometry, IN-SITU Hybridization and Electron Microscopy (2 nd addition), 2001.
Enzyme Histochemistry 315C Histology Research Lab	Muscle Lecture Muscle Lecture Objectives Muscle Lecture HMWK	Cognitive Objective requirements Psychomotor Objective Requirements Affective Objectives Vocabulary Learning Activities	Required Reading: Carson, Freida L: <u>Histotechnology, A Self-Instructional Text 5th edition</u> ; ASCP chapter 13 pp 282-304 Dubowitz and Brooke: <u>Muscle Biopsy: A Modern Approach</u> , 1973, pp. 5 - 73. Carson, Freida L: <u>Histotechnology, A Self-Instructional Text</u> ; ASCP, 1990. Sheehan, Hrapchak: <u>Theory and Practice of Histotechnology</u> ; 1980, Chapter 17, pp. 292-309. Carson, Freida L: <u>Histotechnology Teaching Slide Set</u> ; ASCP, 1993, pp. 34-36. Carson, <u>Histotechnology Teaching Slide Set</u> ; ASCP, 2015, Chapter 13 pp.294-314.
Diagnostic Molecular Techniques 315C Histology Research Lab	Diagnostic Molecular Lecture Diagnostic Molecular PowerPoint Diagnostic Molecular Objectives	Cognitive Objective requirements Psychomotor Objective Requirements Affective Objectives Vocabulary	Required Reading: Carson, Freida L: <u>Histotechnology, A Self-Instructional Text 5th edition</u> ; ASCP chapter 14 pp 306-320

	Diagnostic Molecular HMWK	Learning Activities	
Laboratory Management	Lab management Lecture	Cognitive Objective requirements	Required Reading: Carson, Freida L: <u>Histotechnology. A Self-Instructional Text 5th edition;</u> ASCP chapter 15 pp 322-342
	Lab management PowerPoint	Psychomotor Objective Requirements	
	Lab Management Objectives	Affective Objectives	
	Lab management HMWK	Vocabulary Learning Activities	
Laboratory Informatics	Lab Informatics Lecture	Cognitive Objective requirements	Required Reading: Carson, Freida L: <u>Histotechnology. A Self-Instructional Text 5th edition;</u> ASCP chapter 16 pp 344-350
	Lab Informatics PowerPoint	Psychomotor Objective Requirements	
	Lab Informatics Objectives	Affective Objectives	
	Lab informatics HMWK	Vocabulary Learning Activities	

<p>Cytopreparatory Techniques</p>	<p>Cytopreparatory Techniques Lecture</p> <p>Cytopreparatory Techniques PowerPoint</p> <p>Cytopreparatory Techniques Objectives</p> <p>Cytopreparatory Techniques HMWK</p>	<p>Cognitive Objective requirements</p> <p>Psychomotor Objective Requirements</p> <p>Affective Objectives</p> <p>Vocabulary</p> <p>Learning Activities</p>	<p>Required Reading: Carson, Freida L: <u>Histotechnology, A Self-Instructional Text 5th edition;</u> ASCP chapter 17 pp 352-366</p>
<p>Electron Microscopy</p>	<p>Electron Microscopy Lecture</p> <p>Electron Microscopy PowerPoint</p> <p>Electron Microscopy Lecture Objectives</p> <p>Electron Microscopy Lecture HMWK</p>		<p>Required Reading: Carson, Freida L: <u>Histotechnology, A Self-Instructional Text 3rd edition;</u> ASCP chapter 14 pp 334-348</p> <p>Provided notes/ Handouts</p> <p>Provided PowerPoint</p> <p>Suggested:</p> <p>NSH Self-Assessment Series #5: Immunohistochemistry, Enzyme Histochemistry, Flow Cytometry, IN-SITU Hybridization and Electron Microscopy (2nd addition), 2001.</p>