



Health Science – Histotechnology Concentration

Bachelor of Applied Science | Code: P9212 | 130 credits

CIP (1105100002)

Effective Term: Fall 2024 (2247)

The Bachelor of Applied Science (B.A.S.) in Health Sciences with concentration in Histotechnology is designed to accommodate the unique demands for entry and advancement within the health science industry. Histotechnologists process patient samples for the detection of tissue abnormalities in order to determine the best treatment for the diseases causing the abnormalities. In addition to the dyes and chemicals used to prepare and stain tissues for microscopy, immunological and DNA techniques are utilized to determine specific cell types in tumors. Histotechnologists work in conjunction with the pathology department at a variety of hospital, surgical and clinical locations. Upon completion of the program and the attainment of certification and license, histotechnologists are employed in a variety of health-care settings with the opportunity of upward mobility to supervisory and management positions. Histotechnologist program graduates are eligible for certification by the American Society for Clinical Pathology (ASCP).

Course	Course Title	Credits	Pre-/Co-Requisites
GENERAL EDUCATION REQUIREMENTS – 36 Credits Required (MET WITH A GRADE of “C” OR HIGHER)			
Communications – 6 Credits Required			
ENC 1101	English Composition 1	3	
ENC 1102	English Composition 2	3	Pre-Req ENC 1101
Oral Communication – 3 Credits Required			
Select 3 Credits from the following			
ENC 2300	Advanced Composition & Communication	3	Pre-Req ENC 1101, 1102
LIT 2480	Issues in Literature & Culture	3	Pre-Req ENC 1102
SPC 1017	Fundamentals of Speech Communications	3	
SPC 2608	Introduction to Public Speaking	3	
Humanities – 6 Credits Required			
Group A – Select 3 Credits from the following (State Core):			
ARH 1000	Art Appreciation	3	
HUM 1020	Humanities	3	
LIT 2000	Introduction to Literature	3	
MUL 1010	Music Appreciation	3	
PHI 2010	Introduction to Philosophy	3	
THE 2000	Theater Appreciation	3	
AND			
Group B – Select 3 Credits from the following (MDC Core):			
ARC 2701	History of Architecture 1	3	
ARC 2702	History of Architecture 2	3	
ARH 1000	Art Appreciation	3	
ARH 2050	Art History 1	3	Pre-Req ARH 2050
ARH 2051	Art History 2	3	
ARH 2740	Cinema Appreciation	3	
DAN 2100	Dance Appreciation	3	
DAN 2130	Dance History 1	3	
HUM 1020	Humanities	3	
IND 1100	History of Interiors 1	3	
IND 1130	History of Interiors 2	3	

LIT 2000	Introduction to Literature	3	
LIT 2120	A Survey of World Literature	3	Pre-Req ENC 1101 or ENC 1102 or Equivalent
MUH 2111	Survey of Music History 1	3	
MUH 2112	Survey of Music History 2	3	Pre-Req MUH 2112
MUL 1010	Music Appreciation	3	
MUL 2380	Jazz and Popular Music in America	3	
PHI 2010	Introduction to Philosophy	3	
PHI 2600	Introduction to Ethics	3	
THE 2000	Theater Appreciation	3	

Behavioral and Social Science – 6 Credits Required

Group A – Select 3 Credits from the following:

Must take 3.0 credits from the following group.

AMH 2010	History of the US to 1877	3
AMH 2020	History of the US Since 1877	3
ANT 2000	Introduction to Anthropology	3
ECO 2013	Principles of Economics (Macro)	3
POS 2041	American Federal Government	3
PSY 2012	Introduction to Psychology	3

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Must take 3.0 credits from the following group.

AMH 2010	History of the US to 1877	3
AMH 2020	History of the US Since 1877	3
ANT 2000	Introduction to Anthropology	3
ANT 2410	Introduction to Cultural Anthropology	3
CLP 1006	Psychology of Personal Effectiveness	3
DEP 2000	Human Growth and Development	3
ECO 2013	Principles of Economics (Macro)	3
ISS 1120	The Social Environment	3
ISS 1161	The Individual in Society	3
POS 2041	American Federal Government	3
PSY 2012	Introduction to Psychology	3
SYG 2000	Introduction to Sociology	3
WOH 2012	History of World Civilization to 1789	3
WOH 2022	History of World Civilization From 1789	3

Natural Science – 3 Credits Required (State Core)

Group A – Select 3 Credits from the following (Life Sciences):

BSC 2010	Principles of Biology	3
BSC 2085	Human Anatomy & Physiology	3

OR

Group B - Select 3 Credits from the following (Physical Sciences):

CHM 1020	General Education Chemistry	3
CHM 1045	General Chemistry & Qualitative Analysis	3
PHY 1020	Fundamentals of Physics	3
PHY 2048	Physics with Calculus 1	3
PHY 2053	Physics without Calculus 1	3

NOTE: If a Physical Science course is selected from the State Core, then a Biological Science course must be selected from the MDC Core. If a Life Science course is selected from the State Core, then a Physical Science course must be selected from the MDC Core. In addition, students in the health sciences are recommended to

complete CHM 1033/1033L prior to registering for BSC 2085/2085L. Students in the biotechnology pathway must take BSC 2426/2426L prior to admission to the BS in Biological Sciences degree.

Natural Science – 3 Credits Required (MDC Core)

Group A – Select 3 Credits from the following (Life Sciences):

BSC 2085	Human Anatomy & Physiology 1	3	Co-Req BSC 2085L
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OR

Group B - Select 3 Credits from the following (Physical Sciences):

CHM 1033	Chemistry for Health Sciences	3	Pre-Co-Req CHM 1033L, MAT 1033.
CHM 1045	General Chemistry and Qualitative Analysis	3	Pre-Req CHM 1025 or a passing score on the CART exam, MAC 1105; Co-requisite CHM 1045L

* Any course with the following prefix excluding labs.

NOTE: If a Physical Science course is selected from the State Core, then a Biological Science course must be selected from the MDC Core. If a Life Science course is selected from the State Core, then a Physical Science course must be selected from the MDC Core. In addition, students in the health sciences are recommended to complete CHM 1033/1033L prior to registering for BSC 2085/2085L. Students in the biotechnology pathway must take BSC 2426/2426L prior to admission to the BS in Biological Sciences degree.

Mathematics – 6 Credits Required

Group A Must take 3 credits from the following group (State Core):

MAC 1105	College Algebra	3	Pre-Req MAT 1033
MAC 2311	Calculus & Analytical Geometry	5	Pre-Req MAC1106 and MAC1114, or MAC1114 and MAC1140, or MAC1147
MGF 1130	Mathematical Thinking	3	Student must meet the Developmental Education mathematics requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption)
STA 2023	Statistical Methods	3	Pre-Req: MAT1033 or MGF 1131

AND

Group B Must take 3 credits from the following group (MDC Core):

MAC*			
MAD 2104	Discrete Mathematics	3	
MAP*			
MAS*			
MGF*			
QMB 2100	Basic Business Statistics	3	
STA 2023	Statistical Methods	3	

General Education Elective – 3 Credits Required (MET WITH A “C” LETTER GRADE OR HIGHER)

BSC 1005	General Education Biology	3	
BSC 1005L	General Education Biology Laboratory	1	
BSC 1030	Social Issues in Biology	3	
BSC 1050	Biology and Environment	3	
BSC 1084	Functional Human Anatomy	3	
BSC 1949	Co-op Work Experience 1: BIO	3	
BSC 2010	Principles of Biology	3	
BSC 2010	Principles of Biology Laboratory	2	
BSC 2011	Principles of Biology 2	3	
BSC 2011L	Principles of Biology Laboratory 2	2	
BSC 2020	Human Biology: Fundamentals of Anatomy/Physiology	3	
BSC 2085	Human Anatomy and Physiology 1	3	
BSC 2085L	Human Anatomy and Physiology 1 Laboratory	1	
BSC 2086	Human Anatomy and Physiology 2	3	
BSC 2086L	Human Anatomy and Physiology 2 Laboratory	1	

BSC 2250	Natural History of South Florida	3
BSC 2423C	Methods and Applications of Cell Culture and Protein Biotechnology	3
BSC 2426	Biotechnology Methods and Applications 1	3
BSC 2426L	Biotechnology Methods and Applications 1 Lab	2
BSC 2427	Biotechnology Methods and Applications 2	3
BSC 2427L	Biotechnology Methods and Applications 2 Lab	2
BSC 2943L	Bioscience Internship	3-6
BSC 2949	Co-op Work Experience 2: BSC	3
CHM 1020	General Education Chemistry	3
CHM 1020L	General Education Chemistry Laboratory	1
CHM 1033	Chemistry for Health Sciences	3
CHM 1033L	Chemistry for Health Sciences Laboratory	1
CHM 1045	General Chemistry and Qualitative Analysis	3
CHM 1045L	General Chemistry and Qualitative Analysis Lab	2
CHM 1046	General Chemistry and Qualitative Analysis	3
CHM 1046L	General Chemistry and Qualitative Analysis Lab	2
CHM 1941	Principles & Techniques of Peer Tutoring in Chemistry	1
CHM 1949	Co-op Work Experience 1: CHM	3
CHM 2124C	Survey of Quantitative Analysis	4
CHM 2200	Survey of Organic Chemistry	3
CHM 2200L	Survey of Organic Chemistry Laboratory	1
CHM 2210	Organic Chemistry 1	3
CHM 2210L	Organic Chemistry 1 Laboratory	2
CHM 2211	Organic Chemistry 2	3
CHM 2211L	Organic Chemistry 2 Laboratory	2
CHM 2949	Co-op Work Experience 2: CHM	3
MCB 2010	Microbiology	3
MCB 2010L	Microbiology Laboratory	2
PHY 1004	Physics with Applications 1	3
PHY 1004L	Physics with Applications 1 Lab	1
PHY 1005	Physics with Applications 2	3
PHY 1005L	Physics with Applications 2 Lab	1
PHY 1020	General Education Physics	3
PHY 1025	Basic Physics	3
PHY 2048	Physics with Calculus 1	3
PHY 2048L	Physics with Calculus 1 Laboratory	1
PHY 2049	Physics with Calculus 2	3
PHY 2049L	Physics with Calculus 2 Laboratory	1
PHY 2053	Physics (without Calculus) 1	3
PHY 2053L	Physics (without Calculus) 1 Lab	1
PHY 2054	Physics (without Calculus) 2	3
PHY 2054L	Physics (without Calculus) 2 Lab	1

LOWER DIVISION ELECTIVES – 24 Credits Required (MET WITH A “C” LETTER GRADE OR HIGHER)

Group A – Must take 9 Credits from the following group

BSC 1005	General Education Biology	3
BSC 1005L	General Education Biology Laboratory	1
BSC 1030	Social Issues in Biology	3
BSC 1050	Biology and Environment	3
BSC 1084	Functional Human Anatomy	3
BSC 1949	Co-op Work Experience 1: BIO	3
BSC 2010	Principles of Biology	3
BSC 2010L	Principles of Biology Laboratory	2

BSC 2011	Principles of Biology 2	3
BSC 2011L	Principles of Biology Laboratory 2	2
BSC 2020	Human Biology: Fundamentals of Anatomy/Physiology	3
BSC 2085	Human Anatomy and Physiology 1	3
BSC 2085L	Human Anatomy and Physiology 1 Laboratory	1
BSC 2086	Human Anatomy and Physiology 2	3
BSC 2086L	Human Anatomy and Physiology 2 Laboratory	1
BSC 2250	Natural History of South Florida	3
BSC 2423C	Methods and Applications of Cell Culture and Protein Biotechnology	3
BSC 2426	Biotechnology Methods and Applications 1	3
BSC 2426L	Biotechnology Methods and Applications 1 Lab	2
BSC 2427	Biotechnology Methods and Applications 2	3
BSC 2427L	Biotechnology Methods and Applications 2 Lab	2
BSC 2943L	Bioscience Internship	3-6
BSC 2949	Co-op Work Experience 2: BSC	3

AND

Group B – Must take 9 credits from the following group

CHM 1020	General Education Chemistry	3
CHM 1020L	General Education Chemistry Laboratory	1
CHM 1033	Chemistry for Health Sciences	3
CHM 1033L	Chemistry for Health Sciences Laboratory	1
CHM 1045	General Chemistry and Qualitative Analysis	3
CHM 1045L	General Chemistry and Qualitative Analysis Lab	2
CHM 1046	General Chemistry and Qualitative Analysis	3
CHM 1046L	General Chemistry and Qualitative Analysis Lab	2
CHM 1941	Principles & Techniques of Peer Tutoring in Chemistry	1
CHM 1949	Co-op Work Experience 1: CHM	3
CHM 2124C	Survey of Quantitative Analysis	4
CHM 2200	Survey of Organic Chemistry	3
CHM 2200L	Survey of Organic Chemistry Laboratory	1
CHM 2210	Organic Chemistry 1	3
CHM 2210L	Organic Chemistry 1 Laboratory	2
CHM 2211	Organic Chemistry 2	3
CHM 2211L	Organic Chemistry 2 Laboratory	2
CHM 2949	Co-op Work Experience 2: CHM	3

AND

Group C – Must take 6 credits from the following group

ACG 2001	ANT*	CGS 2092	CRW*	EME*	FIL 2611
ACG 2001L	ARC*	CGS 2405	CTE 1401	ENC*	FIN 2100
ACG 2011	ARH*	CGS 2423	DAA*	ENG*	FRE*
ACG 2011L	ART*	CHI*	DAN*	ENL*	FRW*
ACG 2021	ASL 1140C	CHM*	DEP*	EUH*	GEA*
ACG 2021L	ASL 1150C	CJC 1000	EAP5*	EVR 1001	GEB 1011
ACG 2031	ASL 2160C	CJC 1162	EAP6*	FIL 1030	GEB 2112
ACG 2071	ASL 2200C	CJD*	ECO*	FIL 1055	GEB 2350
ACG 2071L	AST*	CJL 2062	EDF*	FIL 1100	GEO*
ACG 2100	BOT*	CJT*	EDG*	FIL 1360	GER*
ACG 2110	BSC*	CLP*	EEC*	FIL 1420C	GLY*
ACG 2170	BUL 2130	COP 1170	EEL*	FIL 1431C	GRA 1111C
ACG 2360	BUL 2241	COP 2004	EEX*	FIL 2130	GRA 2117C
ACG 2450	BUL 2242	COP 1220	EGN 2033	FIL 2515C	GRA 2190C
ACG 2630	CCJ*	COP 2171	EGS 1001C	FIL 2552C	GRA 2191C

AFH*	CGS 1021	COP 2800	EGS 1010	FIL 2553C	HAI*
AMH*	CGS 1060C	COP 2805	EGS 1111C	FIL 2560C	HBR*
AML*	CGS 1145	CPO*	EGS 2311	FIL 2572C	HFT 1000
HFT 1210	IDS 1153	MAN 2021	MUS*	PGY 2475	RTV 1100
HFT 1220	IND 1020	MAN 2300	MUT*	PGY 2800C	RUS*
HFT 1300	IND 1100	MAN 2604	MVB*	PHI*	SLS 1106
HFT 1454	IND 1130	MAP*	MVJ*	PHM*	SLS 1125
HFT 2223	IND 1200	MAR 1011	MVK*	PHY*	SLS 1401
HFT 2410	IND 2210	MAR 1720	MVO*	PLA 2003	SLS 1505
HFT 2421	IND 2220	MAR 2150	MVP*	PLA 2104	SLS 1510
HFT 2500	INP*	MAS*	MVS*	PLA 2114	SOP*
HFT 2501	INR*	MAT 1033	MVV*	PLA 2203	SOW*
HFT 2750	IPM 2112	MCB*	MVW*	PLA 2223	SPA*
HFT 2800	ISC*	MET*	OCB*	PLA 2273	SPC*
HLP 1080	ISS 1120	MGF*	OCE*	PLA 2303	SPN*
HLP 1081	ISS 1161	MLT*	OST 2335	PLA 2600	SPW*
HLP 1083	ISS 2270	MMC*	PAD*	PLA 2763	SUR 1001C
HLP 1087	ITA*	MNA 1345	PCB*	PLA 2800	STA*
HOS 1010	JOU*	MNA 2120	PCO*	POR*	SYG*
HSC 1400	JPN*	MTG*	PEP*	POS*	THE*
HSC 1121	JST*	MUC*	PET*	POT*	TPA*
HSC 2100	LAH*	MUE*	PGY 2110C	PSB*	TPP*
HSC 2400	LIN*	MUH*	PGY 2111C	PSC*	VIC*
HUM*	LIS*	MUL*	PGY 2112C	PSY*	WHO*
HUN*	LIT*	MUM 2704	PGY 2401C	PUR*	ZOO*
HUS*	MAC*	MUN*	PGY 2410C	QMB*	
IDS 1044	MAD*	MUO*	PGY 2470C	REL*	

HISTOTECHNOLOGY COURSES (0 credits)

MLT 1752	Quality Control Laboratory Mathematics	2
MLT 1191	Histotechnology 1	3
MLT 1191L	Histotechnology 1 Lab	2
MLT 1195C	Tissue Identification 1	3
MLT 1196	Laboratory Safety and Regulations	2
MLT 2192	Histotechnology 2	3
MLT 2192L	Histotechnology 2 Laboratory	2
MLT 2197C	Tissue Identification 2	4
MLT 2180C	Infectious Diseases & Control Practices	3
MLT 2198	Histochemistry	3
MLT 2198L	Histochemistry Laboratory	2
MLT 1840L	Histotechnology Practicum 1	5
MLT 2841L	Histotechnology Practicum 2	5
MLT 2931	Histotechnology Seminar	2

HISTOTECHNOLOGY VALIDATION - 27 Credits Required

MLS 3997 - Validated Medical Laboratory Technology Course	27
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UPPER DIVISION REQUIREMENTS – 19 Credits Required

HSC 3057	Research Methods and Issues in Health Science	3
HSC 3655	Theoretical Foundations of Health Care Ethics	3
HSC 3701	Leadership and Management in Healthcare	3
MLS 4193	Clinical Molecular Diagnostics	3
MLS 4621	Clinical Biochemistry	4
MLS 4705	Laboratory Operations and Management	3

DISCIPLINE CONTENT CORE - 21 Credits Required

Group A – Histotechnology Courses

MLS 4181C	Immunohistochemistry	3
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MLS 4195C	Enzyme Histochemistry	3
MLS 4196C	IN-SITU Hybridization or FISH	3
MLS 4198	Immunohistochemistry Clinical Concentration	5
MLS 4910	Advances in Histotechnology Capstone	7

HISTOTECHNOLOGY SPECIAL TOPICS – 3 Credits Required

MLS 3150	Special Topics in Histotechnology	3
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