TRANSFER AGREEMENT

BY AND BETWEEN

THOMAS H. GOSNELL SCHOOL OF LIFE SCIENCES
COLLEGE OF SCIENCE
AND
THE DEPARTMENT OF SCIENCE AND MATHEMATICS
NATIONAL TECHNICAL INSTITUTE FOR THE DEAF

The purpose of this transfer agreement is to:

- Attract qualified students to the biology, biotechnology and molecular bioscience, and environmental science Bachelor of Science (BS) programs offered by RIT's College of Science (COS).
- Facilitate the transfer of qualified students from the Laboratory Science Technology (LST) program in the Department of Science and Mathematics at the National Technical Institute for the Deaf (NTID) to the Thomas H. Gosnell School of Life Sciences in RIT's College of Science.
- Encourage academic cooperation and exchange of information between NTID and RIT's College of Science.

RIT's College of Science agrees to accept students who have successfully completed the Associate of Applied Science (AAS) Degree in Laboratory Science Technology by demonstrating academic success by:

- earning a cumulative grade point average of 2.5 or above,
- being a student in good standing,
- completing College Algebra (MATH-101) or the NTID equivalent (Explorations of College Algebra (NMTH-260), Advanced Math (NMTH-275), or Accelerated Algebra II (NMTH-272)) by the end of the AAS degree,
- earning a grade of at least C (2.0) in General & Analytical Chemistry I (CHMG-141) and an introductory COS biology course (General Biology I (BIOL-101) and General Biology I Lab (BIOL 103)); or Introductory Biology I (BIOL 121); or (Introduction to Biology: Organisms and Ecosystems (BIOL-123) and Introduction to Biology Laboratory: Organisms and Ecosystems (BIOL-125)),
- earning an average grade of at least B (3.0) in Analytical Chemistry (NLST-220), Biotechnology I (NLST-240), Biotechnology II (NLST-245), Quantitative Instrumental Analysis (NLST-250), and Chemical Separations & Chromatography (NLST-255) for these courses to be accepted toward the program electives or concentration courses requirement of the BS degree.

The courses taken for the AAS degree that are accepted toward the BS degree vary by BS major and are shown on the tables included in this agreement. Review of this transfer agreement may be initiated by either college in the case of significant curriculum changes, but no less than every five (5) years.

This Transfer Agreement shall take effect on April 1, 2021.

Sophia Maggelakis
Dean
College of Science

Dated: _3/23/2021_____

Gerard Buckley

Gerard J. Buckley, President
RIT Vice President and Dean
National Technical Institute for the Deaf

Dated: __3/12/2021_____

Larry Buckley
Associate Dean for
Academic Affairs
College of Science

Dated: _3-22-2021_____

Gary Behm
Associate Vice President for Academic Affairs
National Technical Institute for the Deaf

Dated: __3/11/2021_____

André O. Hudson, Head
Thomas H. Gosnell School of
Life Sciences
College of Science

Dated: ____3/22/21_____

Matthew A. Lynn
Chair
Department of Science and Mathematics
National Technical Institute for the Deaf

Dated: _3/11/2021_____

AAS DEGREE IN LABORATORY SCIENCE TECHNOLOGY					
TRANSFER OF COURSES TO BACHELOR OF SCIENCE DEGREE IN BIOLOGY					
COURSES IN AAS DEGREE			COURSES ACCEPTED TOWARD BS DEGREE		
Course Number	**Course Title**	**# SCH**	**Course Number**	**Course Title**	**# SCH**
BIOL-101* or BIOL-121 or BIOL 123*	General Biology I* or Introductory Biology I or Introduction to Biology: Organisms and Ecosystems*	3*	BIOL-101* or BIOL-121 or BIOL-123*	General Biology I* or Introductory Biology I or Introduction to Biology: Organisms and Ecosystems*	3 or 4*
CHMG-141*	General & Analytical Chemistry I*	3*	CHMG-141*	General & Analytical Chemistry I*	3*
UWRT-150	FYW: Writing Seminar	3	UWRT-150	FYW: Writing Seminar	3
NLST-xxx / NSCI-xxx	Any 12 credits of NLST/NSCI coursework other than NLST-220, NLST-240, NLST-245, NLST-250, and NLST-255	12	NLST-xxx	Open Electives	12
NLST-220**	Analytical Chemistry	4**			
NLST-240**	Biotechnology I	3**			
NLST-245**	Biotechnology II	3**		Program Electives	18**
NLST-250**	Quantitative Instrumental Analysis	4**			
NLST-255**	Chemical Separations & Chromatography	4**			
xxxx-xxx	LAS-P1 (Artistic)	3	xxxx-xxx	LAS-P1 (Artistic)	3
xxxx-xxx	LAS-P2 (Ethical)	3	xxxx-xxx	LAS-P2 (Ethical)	3
xxxx-xxx	LAS-P3 (Global)	3	xxxx-xxx	LAS-P3 (Global)	3
xxxx-xxx	LAS-P4 (Social)	3	xxxx-xxx	LAS-P4 (Social)	3
NCAR-10	Freshman Seminar	0	YOPS-10	RIT 365: RIT Connections	0
	Wellness course	0		Wellness course	0
				Total Transfer Credits	51*
				Percent of LST AAS Credits Transferred	67%

AAS DEGREE IN LABORATORY SCIENCE TECHNOLOGY					
TRANSFER OF COURSES TO BACHELOR OF SCIENCE DEGREE IN BIOTECHNOLOGY AND MOLECULAR BIOSCIENCE					
COURSES IN AAS DEGREE			COURSES ACCEPTED TOWARD BS DEGREE		
Course Number	**Course Title**	**# SCH**	**Course Number**	**Course Title**	**# SCH**
BIOL-101* or BIOL-121 or BIOL-123*	General Biology I* or Introductory Biology I or Introduction to Biology: Organisms and Ecosystems*	3*	BIOL-101* or BIOL-121 or BIOL-123*	General Biology I* or Introductory Biology I or Introduction to Biology: Organisms and Ecosystems*	3 or 4*
CHMG-141*	General & Analytical Chemistry I*	3*	CHMG-141*	General & Analytical Chemistry I*	3*
UWRT-100, NMTH-27x, NSCI-161, or xxxx-xxx	UWRT-100 Critical Reading & Writing, or a math course that prepares a student for COS calculus (e.g., NMTH-272 Accelerated Algebra II or NMTH-275 Advanced Mathematics), or NSCI-161 Fundamentals of Biology I, or any RIT gen ed designated course)	3		General Education - Elective	3
UWRT-150	FYW: Writing Seminar	3	UWRT-150	FYW: Writing Seminar	3
NLST-xxx / NSCI-xxx	Any 12 credits of NLST/NSCI coursework other than NLST-220, NLST-240, NLST-245, NLST-250, and NLST-255	12	NLST-xxx	Open Electives	12
NLST-220**	Analytical Chemistry	4**		Program Electives	18**
NLST-240**	Biotechnology I	3**			
NLST-245**	Biotechnology II	3**			
NLST-250**	Quantitative Instrumental Analysis	4**			
NLST-255**	Chemical Separations & Chromatography	4**			
xxxx-xxx	LAS-P1 (Artistic)	3	xxxx-xxx	LAS-P1 (Artistic)	3
xxxx-xxx	LAS-P2 (Ethical)	3	xxxx-xxx	LAS-P2 (Ethical)	3
xxxx-xxx	LAS-P3 (Global)	3	xxxx-xxx	LAS-P3 (Global)	3
xxxx-xxx	LAS-P4 (Social)	3	xxxx-xxx	LAS-P4 (Social)	3
NCAR-10	Freshman Seminar	0	YOPS-10	RIT 365: RIT Connections	0
	Wellness course	0		Wellness course	0
				Total Transfer Credits	54*
				Percent of LST AAS Credits Transferred	71%

AAS DEGREE IN LABORATORY SCIENCE TECHNOLOGY						
TRANSFER OF COURSES TO BACHELOR OF SCIENCE DEGREE IN ENVIRONMENTAL SCIENCE						
COURSES IN AAS DEGREE				COURSES ACCEPTED TOWARD BS DEGREE		
Course Number	**Course Title**	**# SCH**		**Course Number**	**Course Title**	**# SCH**
BIOL-101* or BIOL-121 or BIOL-123*	General Biology I* or Introductory Biology I or Introduction to Biology: Organisms and Ecosystems*	3*		BIOL-101* or BIOL-121 or BIOL-123*	General Biology I* or Introductory Biology I or Introduction to Biology: Organisms and Ecosystems*	3 or 4*
CHMG-141*	General & Analytical Chemistry I*	3*		CHMG-141*	General & Analytical Chemistry I*	3*
UWRT-150	FYW: Writing Seminar	3		UWRT-150	FYW: Writing Seminar	3
NLST-xxx / NSCI-xxx	Any 12 credits of NLST/NSCI coursework other than NLST-240, NLST-245, NLST-250, NLST-255	6		NLST-xxx	Open Electives	12
NLST-240**	Biotechnology I	3**			Concentration Courses	14**
NLST-245**	Biotechnology II	3**				
NLST-250**	Quantitative Instrumental Analysis	4**				
NLST-255**	Chemical Separations & Chromatography	4**				
xxxx-xxx	LAS-P1 (Artistic)	3		xxxx-xxx	LAS-P1 (Artistic)	3
xxxx-xxx	LAS-P2 (Ethical)	3		xxxx-xxx	LAS-P2 (Ethical)	3
xxxx-xxx	LAS-P3 (Global)	3		xxxx-xxx	LAS-P3 (Global)	3
xxxx-xxx	LAS-P4 (Social)	3		xxxx-xxx	LAS-P4 (Social)	3
NCAR-10	Freshman Seminar	0		YOPS-10	RIT 365: RIT Connections	0
	Wellness course	0			Wellness course	0
					Total Transfer Credits	47*
					Percent of LST AAS Credits Transferred	62%

* The LST degree includes a requirement that students must complete two technical electives courses (a total of 6 SCH) in the fifth semester of the program. For students who intend to pursue a chemistry- or biology-focused Bachelor of Science degree, these courses are often one COS general chemistry lecture course (usually CHMG-141) and one general biology lecture course (usually BIOL-101 or BIOL-121 or BIOL-123). Students must also take the one-credit co-requisite laboratory courses General & Analytical Chemistry I Lab (CHMG-145) and General Biology I Lab (BIOL-103) or Introduction to Biology Laboratory: Organisms and Ecosystems (BIOL-125). Although credit from CHMG-145, BIOL-103, or BIOL-125 is not required for the LST degree and is therefore not listed as part of this agreement, the credit earned from these laboratory courses will count toward the BS program.

** Students must have earned at least an average grade of B (3.0) in NLST-220, -240, -245, -250, and -255 for these courses to be accepted toward the program electives or concentration courses requirement of the BS degree as indicated in this agreement. Students who have earned less than an average of 3.0 in these courses may have some of these courses accepted toward the BS degree per review by the School of Life Sciences.

TRANSFER AGREEMENT

BY AND BETWEEN

THE SCHOOL OF CHEMISTRY AND MATERIALS SCIENCE
COLLEGE OF SCIENCE
AND
THE DEPARTMENT OF SCIENCE AND MATHEMATICS
NATIONAL TECHNICAL INSTITUTE FOR THE DEAF

The purpose of this transfer agreement is to:

- Attract qualified students to the chemistry and biochemistry Bachelor of Science (BS) programs offered by RIT's College of Science (COS).
- Facilitate the transfer of qualified students from the Laboratory Science Technology (LST) program in the Department of Science and Mathematics at the National Technical Institute for the Deaf (NTID) to the School of Chemistry and Materials Science in RIT's College of Science.
- Encourage academic cooperation and exchange of information between NTID and RIT's College of Science.

RIT's College of Science agrees to accept students who have successfully completed the Associate of Applied Science (AAS) Degree in Laboratory Science Technology by demonstrating academic success, earning a cumulative grade point average of 3.0 or above, being prepared to enter a pre-calculus course (or equivalent) by the start of the fifth semester of the LST program, and being a student in good standing. The transfer of courses that were taken as part of the AAS program into the BS degree depends on a student's performance in certain LST courses as well as on the number of general education and free elective credits permitted in the BS program.

Transfer credit will be awarded for courses completed with a grade of C- or better.

Review of this transfer agreement may be initiated by either college in the case of significant curriculum changes, but no less than every five (5) years.

This Transfer Agreement shall take effect on August 1, 2016.

Sophia Maggelakis
Dean
College of Science

Dated: 6/21/16

Gerard J. Buckley, President
RIT Vice President and Dean
National Technical Institute for the Deaf

Dated: 6/23/16

Laura Tubbs
Associate Dean for
Undergraduate Education
College of Science

Dated: 6/21/16

Stephen F. Aldersley
Associate Vice President for Academic Affairs
National Technical Institute for the Deaf

Dated: 6/23/16

Paul Craig, Head
School of Chemistry and
Material Sciences
College of Science

Dated: 6/21/16

Matthew A. Lynn
Chair
Department of Science and Mathematics
National Technical Institute for the Deaf

Dated: 6/7/2016

AAS DEGREE IN LABORATORY SCIENCE TECHNOLOGY						
TRANSFER OF COURSES TO BACHELOR OF SCIENCE DEGREE IN CHEMISTRY						
COURSES IN AAS DEGREE				COURSES ACCEPTED TOWARD BS DEGREE		
Course Number	Course Title	# SCH		Course Number	Course Title	# SCH
NLST-250*	Quantitative Instrumental Analysis	4		CHMA-161*	Quantitative Analysis	3
				CHMA-165*	Analytical Methods Lab	1
NLST-255*	Chemical Separations & Chromatography	4		CHMA-261*	Instrumental Analysis	3
				CHMA-265*	Instrumental Analysis Lab	1
NLST-xxx	Any 12 credits of NLST coursework other than NLST-250 and NLST-255	12		NLST-xxx	Open Electives	12
NSCI-161	Fundamentals of Biology I	3**				
NMTH-xxx or MATH-xxx	LAS Elective (NMTH-212 Integrated Algebra or higher to satisfy the LST math requirement as determined by initial math placement)	3**				
NMTH-xxx or MATH-xxx	LST Technical Elective (a math course that, with the course above, either prepares a student for COS calculus depending on initial math placement or is Calculus A or Project-Based Calculus I)	3**			LAS Electives	12**
UWRT-100, NMTH-xxx, or MATH-xxx, or xxxx-xxx	LAS Elective (UWRT-100 Critical Reading & Writing, or an additional math course that prepares a student for COS calculus depending on initial math placement, or any RIT gen ed course including Calculus A or Project-Based Calculus I)	3**				
CHMG-141 or CHEM-151	LST Technical Elective (General & Analytical Chemistry I or General Chemistry)	3***		CHMG-141 or CHEM-151	General & Analytical Chemistry I or General Chemistry	3***
UWRT-150	FYW: Writing Seminar	3		UWRT-150	FYW: Writing Seminar	3
xxxx-xxx	LAS-P1 (Artistic)	3		xxxx-xxx	LAS-P1 (Artistic)	3
xxxx-xxx	LAS-P2 (Ethical)	3		xxxx-xxx	LAS-P2 (Ethical)	3
xxxx-xxx	LAS-P3 (Global)	3		xxxx-xxx	LAS-P3 (Global)	3
xxxx-xxx	LAS-P4 (Social)	3		xxxx-xxx	LAS-P4 (Social)	3
	Wellness course	0			Wellness course	0
					Total Transfer Credits	50
					Percent of LST AAS Credits Transferred	65%

AAS DEGREE IN LABORATORY SCIENCE TECHNOLOGY						
TRANSFER OF COURSES TO BACHELOR OF SCIENCE DEGREE IN BIOCHEMISTRY						
COURSES IN AAS DEGREE				COURSES ACCEPTED TOWARD BS DEGREE		
Course Number	Course Title	# SCH		Course Number	Course Title	# SCH
NLST-250*	Quantitative Instrumental Analysis	4		CHMA-161*	Quantitative Analysis	3
				CHMA-165*	Analytical Methods Lab	1
NLST-255*	Chemical Separations & Chromatography	4		CHMA-261*	Instrumental Analysis	3
				CHMA-265*	Instrumental Analysis Lab	1
NLST-xxx	Any 13 credits of NLST coursework other than NLST-250 and NLST-255	13		NLST-xxx	Open Electives	13
NMTH-xxx or MATH-xxx	LAS Elective (NMTH-212 Integrated Algebra or higher to satisfy the LST math requirement as determined by initial math placement)	3**			LAS Electives	9**
NMTH-xxx or MATH-xxx	LST Technical Elective (a math course that, with the course above, either prepares a student for COS calculus depending on initial math placement or is Calculus A or Project-Based Calculus I)	3**				
UWRT-100, NMTH-xxx, or MATH-xxx, or xxxx-xxx	LAS Elective (UWRT-100 Critical Reading & Writing, or an additional math course that prepares a student for COS calculus depending on initial math placement, or any RIT gen ed course including Calculus A or Project-Based Calculus I)	3**				
CHMG-141 or CHEM-151	LST Technical Elective (General & Analytical Chemistry I or General Chemistry)	3***		CHMG-141 or CHEM-151	General & Analytical Chemistry I or General Chemistry	3***
UWRT-150	FYW: Writing Seminar	3		UWRT-150	FYW: Writing Seminar	3
xxxx-xxx	LAS-P1 (Artistic)	3		xxxx-xxx	LAS-P1 (Artistic)	3
xxxx-xxx	LAS-P2 (Ethical)	3		xxxx-xxx	LAS-P2 (Ethical)	3
xxxx-xxx	LAS-P3 (Global)	3		xxxx-xxx	LAS-P3 (Global)	3
xxxx-xxx	LAS-P4 (Social)	3		xxxx-xxx	LAS-P4 (Social)	3
	Wellness course	0			Wellness course	0
					Total Transfer Credits	48
					Percent of LST AAS Credits Transferred	62%

* The substitution of NLST-250 and NLST-255 for CHMA-161, CHMA-165, CHMA-261, and CHMA-265 depends on the following rules:

1. If an LST student has earned a GPA ≥ 3.5 in NLST-220 (Analytical Chemistry), NLST-250 (Quantitative Instrumental Analysis), and NLST-255 (Chemical Separations & Chromatography) and is prepared to enter MATH-171 (Calculus A) upon completion of the LST program, then NLST-250 and NLST-255 will be accepted as a substitution for CHMA-161 (Quantitative Analysis), CHMA-165 (Analytical Methods Lab), CHMA-261 (Instrumental Analysis) and CHMA-265 (Instrumental Analysis Lab).

2. If an LST student has earned a GPA ≥ 3.0 and < 3.5 in NLST-220 (Analytical Chemistry), NLST-250 (Quantitative Instrumental Analysis), and NLST-255 (Chemical Separations & Chromatography) or is not prepared to enter MATH-171 (Calculus A) upon completion of the LST program, then NLST-250 and NLST-255 will be accepted as a substitution for CHMA-165 (Analytical Methods Lab), CHMA-261 (Instrumental Analysis) and CHMA-265 (Instrumental Analysis Lab). Such a student will be required to enroll in and complete CHMA-161 (Quantitative Analysis).

** The LST AAS degree requires that a student complete a core of 9 semester credit hours (SCH) of courses that are LAS general education electives: NSCI-161 (Fundamentals of Biology I), a required math course (NMTH-212 Integrated Algebra or higher), and a third course that is often UWRT-100 Critical Reading & Writing but can be any other general education course including math courses at the pre-calculus or calculus levels depending on the student's initial math placement. LST students must also complete two technical electives courses, which for the purposes of this agreement are one COS general chemistry course (CHMG-141 or CHEM-151 as described later in this document) and one NTID or COS math course that further prepares the student for the calculus coursework required by the baccalaureate programs. Both of these LST technical elective courses carry the LAS general education designation and are generally worth 3 SCH each. Of this total of 15 SCH of courses, the credit earned for CHMG-141 or CHEM-151 counts toward a separate general education requirement in the chemistry and biochemistry BS programs. Some or all of the remaining 12 SCH transfers as follows:

- The biochemistry BS degree allows for 9 SCH of LAS general education electives toward completion of the program. Therefore, of the 12 SCH earned toward the LST degree as indicated above, 3 SCH will not transfer. As such, Fundamentals of Biology I is omitted in the table of LST coursework that transfers into the biochemistry BS program.
- The chemistry BS degree allows for 15 SCH of LAS general education electives toward completion of the program. The 12 SCH of LAS general education credit earned in the LST program applies toward this total in the BS degree. The remaining 3 SCH can be earned a number of ways, such as by taking any of the courses listed below:

NTID Mathematics Courses (NMTH)
NMTH-220 Trigonometry
NMTH-250 Elementary Statistics
NMTH-272 Accelerated Algebra II (instead of NMTH-275 Advanced Math)

COS Mathematics Courses (MATH)
MATH-101 College Algebra
MATH-111 Precalculus
MATH-171 Calculus A
MATH-181 Project-Based Calculus I

NTID Science Courses (NSCI)
NSCI-153 Processes of Science: Environmental Studies
NSCI-154 Physics of Matter
NSCI-155 Processes of Science: Biological Studies
NSCI-156 Processes of Science: Forensics
NSCI-157 Processes of Science: Astronomy
NSCI-201 Principles of Physics
NSCI-270 Concepts of College Physics
NSCI-281 Human Genetics and Evolution
NSCI-282 Scientific Basis of Social Responsibility
NSCI-283 Developmental Human Anatomy
NSCI-284 Principles of Modern Astronomy

*** All students entering the chemistry and biochemistry BS programs, including those transferring from the LST program, are invited to complete the online ALEKS (Assessment and Learning in Knowledge Spaces) diagnostic tool before starting COS chemistry coursework. Students who satisfy the ALEKS requirement by completing the required modules at an 85% success rate will be allowed to enroll in CHEM-151 (General Chemistry) and CHEM-155 (Chemistry Workshop) so that they can complete the required general chemistry coursework in one semester. Students who do not satisfy the ALEKS requirement must take the two-semester General & Analytical Chemistry sequence (CHMG-141, CHMG-142, CHMG-145, CHMG-146). For the purposes of this agreement, either CHMG-141 or CHEM-151 satisfy one of the two required LST technical elective courses. These courses are also used as part of the BS degree requirements but are instead counted toward a general education math/science requirement as specified in the respective baccalaureate program curricula.