

# ARTICULATION AGREEMENT

Between

State University of New York at Albany

And

Urban Assembly New York Harbor School

## Science Research Program

We have entered into this Agreement of intent to work together to enhance educational and career opportunities in order to promote seamless, non-duplicative instruction that benefits students, schools, and the community at large.

Developed through secondary and postsecondary school administrative and instructor course review and collaboration, this Agreement gives college credit towards a college degree for the following courses of study to students fulfilling the criteria as stipulated per programs:

**ACAS 109\* - Intermediate Science Research (2 credits, July - August) - Juniors**

**ACAS 110 - Intermediate Methods of Research (4 credits, September - June) - Juniors**

**ACAS 209\* - Advanced Science Research (2 credits, July - August) - Seniors**

**ACAS 210 - Advanced Methods of Research (4 credits, September - June) - Seniors**

*\* Please note that ACAS 109 and ACAS 209 are offered only during the summer.*

Nathan Dudley Nathan Dudley  
Secondary School Official's Printed Name + Signature

Principal 1/31/12  
Title/Date

DEBERNEE S. PRIVOTT  
Postsecondary School Official's Printed Name + Signature

ASSOCIATE DIRECTOR FOR ADMINISTRATION 2/6/12  
Title/Date

This agreement is effective as of June 06<sup>th</sup>, 2012 until either party decides to dissolve it according to established guidelines as stipulated in the Science Research Program's Curriculum and the University in the High School Program's Policy and Procedures Manual.

See Appendix A: Course List – for the list of courses available for college credit under *terms of agreement within each program of study and the list of competencies required for each.*

See Appendix B: Articulation Agreement Competencies – for the courses and competencies the student must complete satisfactorily.

See Appendix C: Application/Verification Form – for the secondary school verification of successful competency attainment.

See Appendix D: Responsibilities

See Appendix E: Program and Course Description

**Note: This agreement is between these two schools and is valid for these two institutions only. Courses awarded college credit, through this agreement, are unique to these institutions. No assurance is given that college credit awarded through this agreement will transfer to any other postsecondary institution.**

## Appendix A: Course List

For a student to obtain college credit for courses articulated within this program, the student must meet the following criteria:

S/he completes the high school articulated courses with a grade of 60 or better and meets all required competencies.

S/he passes required written and/or performance evaluations as noted in Appendix B: *Articulation Agreement Competencies*.

The student and the student's program instructor submit the required forms and applications to SUNY Albany within the deadlines as determined in the University in the High School Program Policy and Procedure Manual.

Each student meeting the above criteria can be awarded 2 or 4 college credit hours at the State University of New York at Albany for the following articulated courses within this program of study:

Course Number	Course Title	Credits	Grade
ACAS 109*	Intermediate Science Research	2	Juniors
ACAS 110	Intermediate Methods of Research	4	Juniors
ACAS 209*	Advanced Science Research	2	Seniors
ACAS 210	Advanced Methods of Research	4	Seniors

\* Please note that ACAS 109 and ACAS 209 are offered only during the summer.

To know each party's responsibilities under terms of this agreement, please see Appendix D: *Responsibilities*.

Important: In order that the college maintains quality and can assure that quality, it is the college's right to waive courses (or not) as it sees fit.

Please note that all agreements, college credit granted, student promotion, and other decisions are subordinate to the master agreement:

Articulation Agreement between State University of New York Albany and Urban Assembly  
New York Harbor School (NYHS)

**Note:** This agreement is between these two schools and is valid for these two institutions only. Courses awarded college credit, through this agreement, are unique to these institutions. No assurance is given that college credit awarded through this agreement will transfer to any other postsecondary institution.



## Appendix B: Articulation Agreement Competencies

In order for the student to receive credit for this course/these courses at State University of New York Albany, the following additional competencies are expected:

**The requirements of this course as stipulated by the Science Research Program at the University at Albany are as follows:**

1. Attend all regularly scheduled classes (See attendance policy below).
2. Participate at a level appropriate to present year of course, in the school's annual symposium.
3. Commit to 240 or more hours per school year (September to June) for their research work (this includes class time, assessment meetings, and all out of class time spent on the research).
4. Summer research carries a commitment of a minimum 90 hours plus assessment time. These hours include full attendance at your local school symposium for each year that you are in the research course.
5. Maintain a laboratory notebook/journal of all research related work starting at beginning of entry into research course.
6. Maintain a comprehensive portfolio of all research work.
7. Present research at all stages of the work, at all available venues and competitions.
8. Maintain regular, demonstrable contact with a mentor once one is obtained.
9. Develop quarterly chronograms, an end of year abstract, an annual reflection and an assessment of goals.

**It is mandatory for all students to attend our annual research symposium and present a poster of an article read, their work to date, and their findings. In addition to the posters, all research students will present a PowerPoint talk on their research findings.**

### **Specific course requirements and Projected Dates**

The requirements of this course include a minimum of 10 hours of outside independent research in every 2 week cycle during the school year as well as a commitment to a minimum of 90 hours during the rising junior and senior summers. These hours must be documented in a Research Journal, which must be brought to class for each independent session. In addition, other requirements include: 4 research paper drafts, the developing of quarterly chronograms, 3 poster board drafts, and 2 Power Point presentations for eligible students. Students will be required to present their work both in class and at competitions. Each year it is required to enter 3 or more competitions including the school's Research Fair. It is expected that students will have begun to explore a topic of interest and pursued a mentor during the prerequisite class Introductory Marine Research in the 10<sup>th</sup> grade in accordance to a fixed chronogram (figure 1a). Research Journals are due every 2 weeks at the individual student-teacher conference; drafts are due according to a fixed schedule (figure 01b); competition deadlines are posted as they become available, chronograms are due at the beginning and midpoint of each semester, the final research paper drafts are due either in January and June; and the end of year abstract, reflections and assessment of goals are due on the last day of class.

**Figure 01a. Detailed chronogram of major due dates – 10<sup>th</sup> grade Prerequisite Course**

Item	February				March				April				May				June		
WEEK	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Mentor Search	>X	X	X	X	X	X	o	o	o	o	o	o	o	o	o	o	o	o	o
Formulation	>X	X	X	X	X	X	X												
5 article presentation			X	X	X	X	X												
IRB – Results				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Analysis of results													X	X	X	X	X	X	X
1 <sup>st</sup> draft									X										
2 <sup>nd</sup> draft													X						
Final draft																	X		
Poster board drafts														X		X			
Final presentation																		X	

**Figure 01b. Detailed chronogram of major due dates – A CAS 110 + 210**

Item	September				October				November				December				January		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Mentor Search	X	X	X	X	X	o	o	o	o	o	o	o							
Formulation	X	X	X	X	X	o	o	o	o	o	o	o	o	o	o	o	o	o	o
IRB – Results	X	X	X	X	X	o	o	o	o	o	o	o	o	o	o	o	o	o	o
5+ article presentation			X	X	X	X	X												
Analysis of results	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1 <sup>st</sup> draft						X													
2 <sup>nd</sup> draft									X										
3 <sup>rd</sup> draft												X							
Final draft															X				
Poster board drafts												X		X					
Final presentation																		X	

**Figure 01c. Detailed chronogram of major due dates – CAS 110 + 210 (o = prolonged schedule)**

Item	February				March				April				May				June		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Mentor Search	>o	o	o	o	o	o	o												
Formulation	>o	o	o	o	o	o	o												
5 article presentation			X	X	X	X	X												
IRB – Results	>o	o	o	o	o	o	o	X	X	X	X	X	X	X	X	X	X	X	X
Analysis of results													X	X	X	X	X	X	X
1 <sup>st</sup> draft					X														
2 <sup>nd</sup> draft									X										
Final draft													X						
Poster board drafts												X		X					
Final presentation															X				



## Grading Scheme

Grades are on an A-E scale and there are no S/U (pass/fail) options (figure 02). Grading will be based on the following components: Research Project (*i.e.* research plan, final drafts, grading sheet), Tech. Read + Write (*i.e.* journal, drafts), Lab/Field Work, Applied Statistics, Conferences and Applications, and Presentations (*i.e.* articles, research fairs). **Full participation in the local symposium will account for 20 percent (figure 03) of the final grade, in lieu of a final exam as follows:**

Sophomores will participate in the full symposium and each will produce and present a poster/slide show based on a previous peer reviewed article in his/her field.

Juniors will participate in the full symposium and each will produce and present a poster/slide show based on her/his own review of pertinent literature and any work done to date under the aegis of a mentor.

Seniors will present both a poster of their research findings and slide show with a talk of their research findings.

Figure 02. Grading Scheme

Grade Scale	Grade Conversion	Grade Scale	Grade Conversion
93-100	A	73-76	C
90-92	A-	70-72	C-
87-89	B+	67-69	D+
83-86	B	63-66	D
80-82	B-	60-62	D-
77-79	C+	Grade < 60	E

Figure 03. Grading Components

Research Project ( <i>i.e.</i> research plan, final drafts, grading sheet)	30 %
Tech. Read + Write ( <i>i.e.</i> journal, drafts)	10 %
Lab/Field Work	10 %
Applied Statistics	10 %
Student-Teacher Conferences and Applications	10 %
Practice presentations ( <i>i.e.</i> articles + drafts)	10 %
Final Presentation at local symposium	20 %

## Attendance policy

Attendance is required at all sessions, unless the student is at their specific research site conducting their work IN WHICH CASE THEY MUST KEEP A DETAILED LOG SHEET WITH DATES, TIMES, AND MENTOR SIGNATURES. No more than 10 absences from the group sessions are allowed in the full year classes. Unexcused absences that occur on the day students are assigned to present results will result in failure for that day. An unexcused absence from an individual research meeting results in reduction of points on your biweekly grading sheet.

### Safety policy

Working in laboratories carries the potential for accidents. All students are expected to behave in a safe manner to prevent mishaps.

### Standards of Academic Integrity

The University at Albany expects all members of its community to conduct themselves in a manner befitting its tradition of honor and integrity. Members are expected to assist the University by reporting suspected violations of academic integrity to appropriate faculty and/or administrative offices. Behavior that is detrimental to the University's role as an educational institution is unacceptable. Claims of ignorance, of unintentional error, or of academic or personal pressures are not sufficient reasons for violations of academic integrity.

The following are examples of the types of behaviors that are defined as academic dishonesty and are therefore unacceptable:

**Plagiarism:** Presenting as one's own work the work of another person. Plagiarism includes paraphrasing or summarizing without acknowledgment, submission of another student's work as one's own, the purchase of prepared research or completed papers or projects, and the unacknowledged use of research sources gathered by someone else; **Cheating on Examinations:** Giving or receiving unauthorized help before, during, or after an examination; **Multiple Submission:** Submitting substantial portions of the same work for credit more than once; **Sabotage:** Destroying, damaging, or stealing of another's work or working materials; **Unauthorized Collaboration:** Collaborating on projects, papers, or other academic exercises that is regarded as inappropriate by the instructor(s); **Falsification:** Misrepresenting material or fabricating information in an academic exercise or assignment; and **Bribery:** Offering or giving any article of value or service to an instructor in an attempt to receive a grade or other benefits not legitimately earned or not available to other students in the class. **Circumventing Security:** Users are prohibited from attempting to circumvent or subvert any system's security measures. Users are prohibited from using any computer program or device to intercept or decode passwords or similar access control information.

The violations listed above should be reported to the SUNY Albany University in the High School Program Office immediately. All parties involved will be directed accordingly.



## Appendix C: Application/Verification Form For College Credit

NOTE: This section can be overridden by SUNY Albany – UHS's WEB Registration Application and mailed Application sent via mail according to SUNY Albany – UHS's Policy and Procedures Manual.

To be completed by the student and the secondary school teacher for the student who has met the secondary school course and/or competency requirements.

Part 1-To be filled out by student:

Student's Name \_\_\_\_\_ Program \_\_\_\_\_

Student's Address \_\_\_\_\_

City \_\_\_\_\_ Zip Code \_\_\_\_\_

Teacher's Name \_\_\_\_\_ Date \_\_\_\_\_

Course Number	Course Title	Credits
_____	_____	_____

Part 2-To be filled out by instructor:

**UA New York Harbor School**

Academic Grade \_\_\_\_\_ Lab Grade (if applicable) \_\_\_\_\_

Industry/Post-secondary standard(s) met? YES NO Date \_\_\_\_\_ Not applicable \_\_\_\_\_

If YES, what standard(s)? \_\_\_\_\_

Comments  
\_\_\_\_\_  
\_\_\_\_\_

Verified by \_\_\_\_\_

**Secondary School Instructor's Signature / Date**

## Appendix D: Responsibilities

WHO	RESPONSIBILITIES
Secondary and Post-Secondary Administration	1. Complete and sign the Program/Course Articulation Agreement Form,
Secondary School Instructor	2. Identifies the course comparable to a college course, 3. Participates in Articulation Agreement development, 4. Explains the Articulated Program and various options to the student, 5. Verifies if the student has completed one or more articulated courses in the Program of Study and has achieved the necessary course competencies and performance levels, 6. Completes the <i>Application/Verification Form</i> and submits it to the college granting articulated credit by the required date <i>or</i> Informs students of the Web Registration Application due dates and Application/Registration form due dates that are mailed from SUNY Albany - UHS, 7. Inform students of fee due dates for the college courses being taken, 8. Gives a copy of the <i>Application/Verification Form</i> to the student and files a copy with the high school counselor or identified "go-to" person for the student's permanent record <i>or</i> require that student prints out two copies of Web Registration Application Confirmation Pages for student's own files and High school permanent record file, 9. Clearly advises students on all options and ramifications of withdrawing from the course and other course details,
High School Counselor or Designee	10. Notifies instructors of the Articulation Agreements and Programs, 11. Helps with students getting on board, 12. Assists instructors and students with the process by getting and supplying materials to enable and support the instructor in doing his/her part, 13. Talks with parents as needed, 14. Maintains a copy of each <i>Application/Verification Form</i> or <i>Web Registration Application Confirmation</i> page in the student's permanent file,



	<p>15. Maintains file with all articulation agreements,</p> <p>16. Sends letter to student, if required, stating terms and conditions of articulated credit award,</p> <p>17. Monitor's student progress, as appropriate, to ascertain meeting criteria,</p> <p>18. Collects data on all students at the school site,</p>
High School Student	<p>19. Notifies the appropriate person at the secondary school of his/her intent,</p> <p>20. Fills out all required hard copy/web forms, including Part 1, the <i>Application/Verification Form</i> or on-line <i>Web Registration Application</i>,</p> <p>21. Demonstrates course competency at the approved proficiency level,</p> <p>22. Applies to the college for admittance in a timely fashion and submits transcripts along with the application,</p> <p>23. Has the instructor complete Part 2 of the <i>Application/Verification Form</i> or <i>Web Registration Application</i> and submit it to the college granting articulated credit,</p>
College Instructor/Liaison	<p>24. Collaborates with the high school instructor on curriculum-level review,</p>
University in the High School (UHS) Personnel	<p>25. No additional procedures other than those already established and in practice by UHS will be required. Some of these procedures may be:</p> <p>26. Notifies Registrar, if required, when credit is to be awarded,</p>
College Registrar	<p>27. No additional procedures other than those already established and in practice by UHS will be required. Some of these procedures may be:</p> <p>28. Review and record the articulated credit on the student's transcript upon notification that all criteria have been met.</p>

## Appendix E: Program and Course Description

**Introduction.** The University in the High School Program offered by the State University of New York at Albany and fully articulated with the Urban Assembly New York Harbor School provides courses to students with the academic challenges of college-level curricula during their final year(s) of high school. As a "bridging" experience to college, UHS courses can help students begin to develop the skills and experience necessary for academic success in higher education. Enrollment in UHS courses may provide future opportunities to students, such as the ability to enroll in higher-level college courses or to complete a four-year degree in a shorter amount of time.

Upon successful completion of UHS course requirements, students will receive credit from the University at Albany for the courses in which they have enrolled and for which they have paid. These credits will form the basis of a permanent post-secondary academic record at the University at Albany. Credits obtained through the University at Albany may be eligible for transfer to colleges and universities throughout the country.

Specifically the Science Research Program is based on hands-on, problem-based learning strategies. Students will formulate and execute advanced research projects to address real-world problems (*e.g.* resource management, ecology, medicine, *etc.*). In order to be successful students must be ambitious, be able to think outside the box, build their own knowledge base, and be able to work in a team.

### Course Descriptions

#### **A CAS 109 Intermediate Science Research (2 college credits)**

Students will be introduced to research methods in the natural and social sciences by accessing scientific databases, by using on-line bibliographic search techniques, consulting doctoral-level research scholars, developing hypotheses and performing experiments to test them, and by writing research papers and making presentations at scientific symposia. It is expected that the students will have done many of these activities in the prerequisite high school course, and in this course emphasis is placed upon the formulation of hypotheses and initiation of experiments in consultation with mentors. Prerequisite(s): completion of the 10<sup>th</sup> grade Marine Biology Research class at the high-school level; permission of instructor. Offered summer session only.

#### **A CAS 110 Intermediate Methods of Research (4 college credits)**

Students will learn research methods by formulating projects in the natural and social sciences. Authentic data will be generated or accessed from on-line databases. Students will also perform exhaustive bibliographic searches, consult doctoral-level research scholars, develop hypotheses, and execute projects to test them. This course requires the submission of at least 4 research paper drafts, 3 poster board drafts, and 2 slide show presentation drafts. Students must submit their completed projects to 3 or more research fairs throughout the NYC region. It is also expected that prospective students will have done many of these activities in the prerequisite high school course, and in this course emphasis is placed upon obtaining meaningful results in consultation with mentors. Students are expected to invest at least five



(5) hours per week outside of class on their research work and must be enrolled throughout an entire academic year to obtain credit. Prerequisite: completion of the 10<sup>th</sup> grade Marine Biology Research course.

### **A CAS 209 Advanced Science Research (2 college credits)**

Continuation of work undertaken in A CAS 109 or equivalent with emphasis placed upon the completion of experiments in consultation with mentors. Students will consult with their teachers as necessary, but will not meet in a formal classroom period. Prerequisite(s): satisfactory completion of A CAS 109 or completion of two years of an approved science research course at the high school level; permission of instructor; offered summer session only.

### **A CAS 210 Advanced Methods of Research (4 college credits)**

Continuation of work undertaken in A CAS 110 or equivalent with emphasis placed upon the communication of results. This course requires the submission of at least 4 research paper drafts, 3 poster board drafts, and 2 power point presentation drafts. Students must submit their completed projects to 3 or more research fairs throughout the NYC region. Students are expected to spend at least three hours per week outside of class. Prerequisite(s): satisfactory completion of A CAS 110 or completion of two years of an approved science research course at the high school level; permission of instructor; students must be enrolled throughout an entire academic year to obtain credit.

### **Location and Meetings**

A CAS 210 will meet Mondays and Wednesdays from 6<sup>th</sup> through 8<sup>th</sup> periods in room 320 unless previously warned. A CAS 110 will meet Tuesdays and Thursdays from 6<sup>th</sup> through 8<sup>th</sup> periods in room 320 unless previously warned. The class structure will be broken down into 3 components: Technical Reading and Writing, Applied Statistics, and Seminars of Project Formulation (figure 04). Every other week each student meets one on one in a conference with the instructor, where the student's progress in developing a research plan and carrying out a project is discussed and evaluated. In addition, new goals are formulated for the next session. In the seminar, students will be required to present their findings to their fellow classmates. In this environment they are critiqued on the content of their research, as well as their presentation skills. Project Formulation theory will be given during the Seminar class.

**Figure 04. Class activity schedule for A CAS 110 + 210**

<b>Period</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
6 <sup>th</sup>	A CAS 210 Conferences/ Ind. Study	A CAS 110 Conferences/ Ind. Study	A CAS 210 Conferences/ Ind. Study	A CAS 110 Conferences/ Ind. Study	
7 <sup>th</sup>	A CAS 210 Applied Statistics	A CAS 110 Applied Statistics	A CAS 210 Tech. Read + Write	A CAS 110 Tech. Read + Write	*Note: field work can override schedule.
8 <sup>th</sup>	A CAS 210 Proj. Form.	A CAS 110 Proj. Form.	A CAS 210 Proj. Form.	A CAS 110 Proj. Form.	