

Student Learning Clusters | 2022-2023

Architecture/Construction

Biomedical Science

Business & Finance

Communications

Culinary Arts

Engineering

Humanities

Music & Performing Arts

Transportation/Automotive

Visual Arts



Teaching students to meet the challenges of today and tomorrow with confidence and integrity

VISION OF A GRADUATE



COMMUNICATOR

COLLABORATOR

SELF-DIRECTED LEARNER

NNOVATOR

GLOBAL CITIZEN Dear SHS Students, Parents, and Guardians:

Simsbury High School is one of the best secondary schools in the state of Connecticut. We can say this based on the quality of our faculty; the success of our students; and the depth of our academic, athletic, and extra-curricular offerings. We are proud to provide students with learning experiences that help them to develop the knowledge and 21st century skills necessary for success in college and beyond.

As you review our *Program of Studies*, you may notice that our elective courses occur in sequences. While our electives have value individually, they can also be taken sequentially to create a pathway to potential careers. In this booklet, we have organized our elective offerings into 10 Student Learning Clusters:

- Architecture/Construction
- **Biomedical Science**
- Business and Finance
- Communications
- Culinary Arts

- Engineering
- Humanities
- Music and Performing Arts
- Transportation/Automotive
- Visual Arts

Each cluster has extracurricular offerings, options for online or collegiate study, connections to the larger Simsbury community, and valuable personal contacts that enhance the experiences of our students.

These cluster maps are intended to be used as tools to *start* a conversation about course planning and not as a prescriptive set of classes and activities that students would pursue rigidly. It is our belief that each student's path is unique and is best planned through ongoing discussion with parents, teachers, and counselors. In addition, we recognize that adolescence is a time when even the best plans change! We suggest that you use these sheets to help you develop a personalized plan that addresses your high school experience as well as your post-secondary aspirations.

As seen in Simsbury High School's Vision of a Graduate document, we pride ourselves on our ability to provide students with learning experiences that are based on our theme this year, emphasizing "passion and pride." We believe that our elective offerings play a big part in making that happen. Our enhanced and updated elective program is an incredibly exciting aspect of our school. We urge you to take full advantage of it! We invite you to review these Student Learning Clusters as part of your personalized course selection process.

Sincerely,

Stephen Pahan Gry Stiller

Stephen Patrina Principal

Gregory Stillman Director of School Counseling

NOTE: Capstone and Capstone Optional courses throughout this booklet are indicated by the symbols **C** and **O**, respectively.



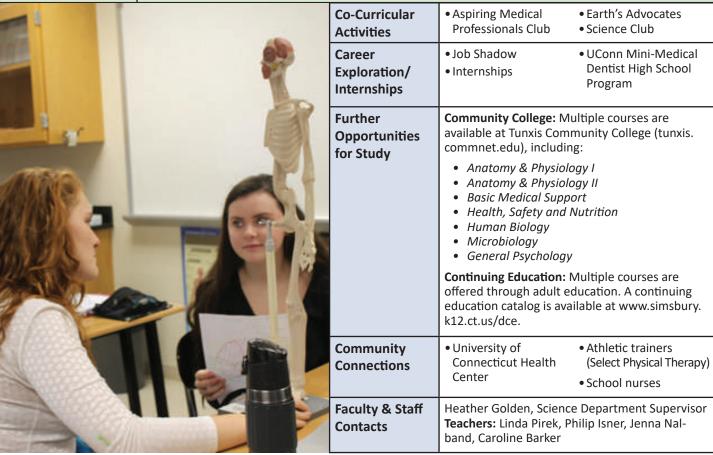
The **Architecture/Construction** cluster is recommended for any student interested in pursuing a career in architecture, engineering, manufacturing, or construction. By matriculating through this course sequence, students will acquire a spectrum of related skills from design fundamentals to actual implementation of their own plans/creations that will have them prepared for post-secondary study in these fields.

		d Elective Courses s Cluster		Other Suggested Classes	
7/8	 Unified Arts Rotation in Technology Education 8th Grade Full Year Technology Education Elective 			 Drawing Advanced Observational Drawing 	
9	Architecture 1Construction 1			 Entrepreneurship Marketing PLTW Engineering Courses 	
10	Architecture 2Construction 2				
11	 C Architecture 3 Manufacturing Enterprise 	2			
12	 Internship Program/Ir Manufacturing Enterp 				
Post Secondary	COLLEGIATE MAJOR relating to this cluster: Architecture, Engineering (Mechanical, Civil, Architecture, Manufacturing), Technology Education, Construction, Drafting, Landscape Architecture, Manufacturing SAMPLE OCCUPATIONS relating to this cluster: Architect, Civil Engineer, Industrial Engineer, Environmental Engineer, Mechanical Engineer, Landscape Architect, Surveyor, Private Contractor				
		Co-Curricular Activities	FBLA Home Builders a Remodelers Association of Centra (HBRA) Student Design Competition		
		Career Exploration/ Internships	 Job Shadow Internships (available through Chamber of Commerce) Connecticut Innovation Academy HBRA Connecticut Busi and Industry Association (CBIA 		
		Further Opportunities for Study	Asnuntuck Community College: Asnuntuck pr vides students the opportunity to participate ir lege programs in electronics, welding, and prec machining technology, all of which involve stat the art facilities, equipment, and instruction. So school counselor for more information.		
			Continuing Education: Multiple courses are offer through adult education. A continuing education catalog is available at www.simsbury.k12.ct.us/c		
The second secon		Community Connections		of Commerce • Guest Speakers • Construction • Ensign-Bickford Industries	
		Faculty & Staff Contacts	Dr. Wendy Ku, CTE Department Supervisor; Jan Compton, Technology Education Department Coordinator Teachers: Dr. Wendy Ku, Cameron Bopp, James Compton, Dan Warner		



SHS has partnered with **Project Lead the Way (PLTW)** to offer a four-year Biomedical Science elective cluster. Nearly 80 million Americans were born between 1946 and 1964; these "baby boomers" are now approaching age 75—and the impact of this change in U.S. demographics is expected to be tremendous. Our nation's aging population, combined with longer life expectancies and rapidly advancing technology, has created a growing demand for highly skilled professionals in a broad spectrum of health care and science careers. PLTW Biomedical Science provides a rigorous, inquiry-based curriculum. The program's combination of activity-based, project-based, and problem-based learning styles will engage students and better prepare them for the workplace or postsecondary education in the life and health sciences.

	Recommended Elective Courses in this Cluster	Other Suggested Classes
7/8	 Science courses Unified Arts Rotation in Family and Consumer Sciences 	Advanced Observational DrawingForensicsStatistics
9	Principles of Biomedical Science	EconomicsChild Development
10	Human Body Systems	Individual and Family Development (UCONN)
11	Medical Interventions	Environmental ScienceAP Environmental Science
12	G Biomedical Innovation	
Post Secondary	COLLEGIATE MAJOR relating to this cluster: Biology, Physics, Nursing, Veterinary Medicine SAMPLE OCCUPATIONS relating to this cluster: Engineer, De Therapist, Speech Pathologist, Physician, Nurse, Veterinarian, Micro Radiologist, Pharmacist, EMT, Paramedic, Medical Illustrator	ntist, Forensic Investigator, Physical



Business & Finance **Business & Finance** courses encourage independent thinking, collaborative efforts, and individual achievement essential for success in our ever-changing technological world. **FINANCE** courses encourage making wise economic decisions related to personal financial affairs, the successful operation of organizations, and the economic activities of the country. **MARKETING** courses introduce students to the processes and functions involved in transferring business products or services to a consumer within an environment of rapidly evolving technology, interdependent national economies, increasing demands for ethical and social responsibility, and constant change.

		d Elective Courses s Cluster		Other Si	uggested Classes	
9				 AP Economics Digital Design		
10	Accounting 1Accelerated Accounting			-	LawMultiple World Languages	
11	 Accounting 2 Banking & Investments Entrepreneurship 1 Marketing 			 Public Spea Statistics AP Statistics Computer S AP Comput PLTW Introduction 	s Science Principles er Science	
12	 Personal Finance Entrepreneurship 1 Entrepreneurship 2 Sports & Entertainment Marketing 			Engineering	g Design neering Design &	
Post Secondary						
		Activities • National Honor Sc • Junior Activities		Business	 School Store Sports Management Student Council Stock Market Club Yearbook 	
-		Career Exploration/ Internships	through		 Internships (available through Chamber of Commerce) 	
CON FUTURE	NECTICUT FBIA BUSINESS LEADERS OF AMERICA	Further Opportunities for Study	at Tunxis C edu), inclui • Principle • Manage • Business • Principle • Entrepre • Principle Continuing through ac	ommunity Colle ding: s of Financial Accounting rial Accounting rial Finance Ethics s of Marketing neurship s of Finance 5 Education: Mu lult education. A	ple courses are available ge (tunxis.commnet. <i>punting</i> Itiple courses are offered continuing education v.simsbury.k12.ct.us/dce.	
		Community Connections		of Commerce	• Rotary (Interact Club)	
	X	Faculty & Staff Contacts		Deb Manning, Jo	nent Supervisor bhn Murphy,	



Simsbury High School offers course work in multiple disciplines for students interested in **Communications,** ranging from the traditional (photography) to the more contemporary (website design, video production). Through the courses in this cluster, students will develop skills in multiple modes of communication and prepare themselves for post-secondary study, especially in the fields of modern communication that depend upon technology.

	Recommended Elective Courses in this Cluster	Other Suggested Classes			
7/8	 Unified Arts Rotation in Technology Education 8th Grade Full Year Technology Education Elective 	 Multiple World Languages Animation and Film Marketing 			
9	 Introduction to Business Technologies Digital Video Production 1 Introduction to Music Technology 	 Psychology Law Theater 			
10	 Digital Photography 1 Website Design Elements Digital Video Production 2 Film Study 	Public Speaking			
11	 Digital Photography 2 Digital Video Production 2 Television Production Digital Design 1 Film Study 				
12	 Independent Study Television Production O Digital Design 2 Film Study Advanced Film Study 				
Post Secondary	COLLEGIATE MAJOR relating to this cluster: Communications, Media Studies, Graphic Design, Journalism, Information Technology, Television Production, Fine Arts/Photography, Arts & New Media SAMPLE OCCUPATIONS relating to this cluster: Journalist (print, broadcast), graphic designer, film/				
	sound editor, advertising professional, marketer, photographer, tele	evision producer			



Secondary	SAMPLE OCCUPATIONS relating to this cluster: <i>Journalist (print, broadcast), graphic designer, film/ sound editor, advertising professional, marketer, photographer, television producer</i>					
-		Co-Curricular Activities	• <i>Trojan News</i> • Yearbook	• Anime Club • Debate Team		
		Career Exploration/ Internships	 Simsbury Community Television (SCTV) Job Shadow 	 Internships (available through Chamber of Commerce) 		
		Further Opportunities for Study	 Continuing Education: Multiple courses are offered through adult education. A continuing education catalog is available at www.simsbuk k12.ct.us/dce. Greater Hartford Academy of the Arts: Magn school in Hartford specializing in the arts. 			
- Aller		Community Connections	 Simsbury Community Television (SCTV) Guest Speakers 	 Field Trips (local TV, ESPN) FOX61 News 		
		Faculty & Staff Contacts	Dr. Wendy Ku, CTE Departr Compton, Technology Educ Coordinator; Shannon Gag K-12	cation Department		

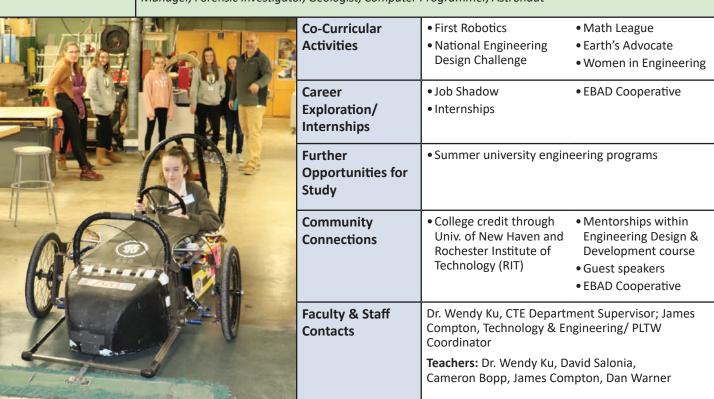
Culinary Arts	Culinary Arts courses are grounded in authentic, experiential learning. Students are provided unique opportunities to develop personal responsibility, motivation, and interpersonal skills. Through the exploration of and participation in the multi-faceted culinary world, students demonstrate critical thinking and problem solving strategies. SHS graduates who have participated in the Culinary Arts cluster have gone on to enjoy successful careers in the food and hospitality industry.					
	Recommended Elective Courses in this Cluster	Other Suggested Classes				
7/8	 Unified Arts Rotation in Family & Consumer Sciences 8th Grade Full Year Family & Consumer Sciences Elective 	AccountingMarketingPhotography				
9	 Smart Cooking Baking and Pastry Arts 1 Regional and International Cuisines 1 	 Digital Design Digital Video Production Entrepreneurship 				
10	 Introduction to Culinary Arts Baking and Pastry Arts 1 Regional and International Cuisines 2 	Public Speaking				
11	 Introduction to Culinary Arts or Culinary Arts 2 Baking and Pastry Arts 2 Event Planning 					
12	 Culinary Arts 2 or Culinary Arts Capstone Event Planning 					
Post Secondary	COLLEGIATE MAJOR relating to this cluster: <i>Culinary Arts, Na</i> <i>Restaurant Management</i> SAMPLE OCCUPATIONS relating to this cluster: <i>Baker, Banqu</i> <i>Educator, Dietitian, Event Planner, Food Advertising, Food Scientist, Fo</i> <i>related careers, Restaurant Manager or Owner, Retail careers, Dining</i>	iet Manager, Caterer, Chef, Culinary od Stylist, Food Critic, Hospitality & Tourism				



Engineering

SHS has partnered with **Project Lead the Way (PLTW)** to offer a four-year engineering elective cluster. PLTW's sequence of courses, when combined with college preparatory math and science courses in high school, prepares students for the scope, rigor and discipline of engineering courses in college, thus resulting in an increase in student success rates in college engineering programs. PLTW students will receive training in current technology using the latest computer software and equipment; participate in a hands-on, activity-oriented program that utilizes team efforts; earn up to 10 college credits through the University of New Haven or Rochester Institute of Technology (RIT); and be prepared to pursue a career in a field where a national employment shortage exists and pay scales are among the highest for entry-level professionals.

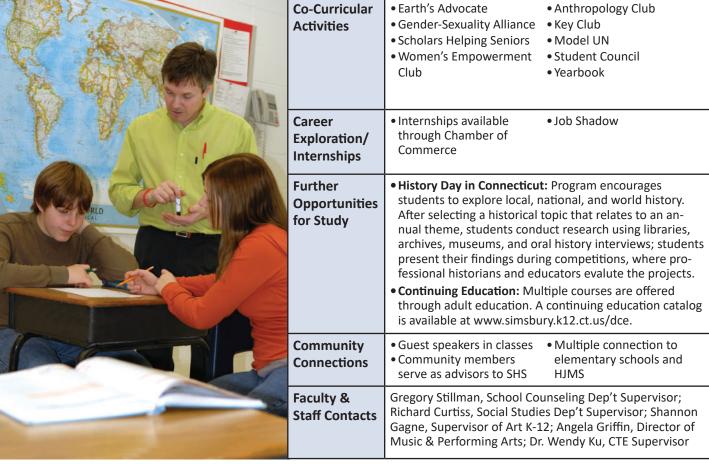
	Recommended Elective Courses in this Cluster	Other Suggested Classes		
7/8	 Unified Arts Rotation in Technology Education 8th Grade Full Year Technology Education Elective 	 Drawing Advanced Observational Drawing 		
9	 PLTW Introduction to Engineering Design 	 Forensics Architecture Automotive Technology Manufacturing Enterprise 		
10	PLTW Principles of Engineering	 Manufacturing Enterprise Construction Marketing & Finance Entrepreneurship 		
11	PLTW Digital ElectronicsPLTW Aerospace Engineering	Economics AP Environmental Science Statistics		
12	 PLTW Engineering Design and Development 	Computer Science		
Post Secondary	COLLEGIATE MAJOR relating to this cluster: Engineering and civil, electrical, chemical, biological, agricultural, architectural, con environmental, information systems, manufacturing) Mathematic SAMPLE OCCUPATIONS relating to this cluster: Engineer, Pro Manager, Forensic Investigator, Geologist, Computer Programmer,	nputer, construction, drafting & design, s, Chemistry, Biology, Physics, Capstone oduct Designer, Architect, Project		





The **Humanities** are defined as the branches of learning that have primarily a cultural character. Unlike other Student Learning Clusters at SHS, the Humanities are not meant to be a logical *sequence* of courses but rather a set of experiences—in the tradition of the liberal arts—that will appeal to students with interest in the social sciences, literature, the arts, and other disciplines. Students who might explore another Student Learning Cluster in depth could still benefit from an exploration of courses in the Humanities

	Recommended Elective Courses in this Cluster	Other Suggested Classes
7/8	Beyond the traditional core curriculum, students interested in the Humanities should consider the following classes as they plan their course of study:	 Multiple World Languages
9	 Art courses Music courses Theater courses Child Development courses Individual and Family AP Human Geography AP Seminar 	
10	 Law Development (UCONN) G AP Research Sociology Psychology Public Speaking 	
11	 AP Psychology AP Economics Film Study Advanced Film Study 	
12	 AP United States African American/Black and Government & Politics Puerto Rican/Latino Studies AP European History 	
Post Secondary	COLLEGIATE MAJOR relating to this cluster: Liberal Arts, English, History, P American Studies, International Studies, Sociology SAMPLE OCCUPATIONS relating to this cluster: Educator, Historian, Journa Human Services Worker, Lawyer, Psychologist	



Music & Performing Arts The Department of **Music & Performing Arts** offers a variety of courses to meet the diverse needs of high school students. Each course provides students with an in-depth experience in music or theater and an opportunity to grow as artists in an ensemble setting. Students may pursue a path that focuses on voice, band, orchestra, or theater. Students may also choose courses across areas and create a unique series of music and performing arts electives throughout their high school career.

		Other Suggested Classes				
7/8	Middle School	Performing Ensen	nbles or Music	Composition	 Sports & Entertainment Marketing 	
	Vocal Emphasis	Band Emphasis	String Emphasi	is Performing Arts		
9	Treble Choir <i>or</i> Tenor Bass Choir	Symphonic Winds <i>or</i> Percussion or Sax Ensemble	Concert Orchestra <i>or</i> Chamber Orchestra	Introduction to Theater	 Personal Finance Entrepreneurship Psychology Fine Arts 	
10	Mixed Chorale Adv. Treble Choir	Symphonic Winds <i>or</i> Percussion or Sax Ensemble	Concert Orchestra <i>or</i> Chamber Orchestra	Intermediate Theater	Fine ArtsPublic SpeakingFilm Study	
11	Mixed Chorale or O Adv. Treble Choir Music Theory	Symphonic Winds <i>or</i> Percussion or Sax Ensemble Music Theory	Concert Orchestra or Chamber Orchestra Music Theory	Theater 1	Other Music & Performing Arts Courses Jazz Ensemble Song Writing & Composition Unified Theater Technical Theater	
12	 Mixed Chorale or Simsbury Singers Music Theory 	 Symphonic Winds or Percussion or Sax Ensemble Music Theory 	 Concert Orchestra or Chamber Orchestra Music Theo 	• Advanced Theater 2		
Post Secondary	COLLEGIATE MAJOR relating to this cluster: Music Performance, Music Business, Music Education, Composition, Music Therapy, Theater, Theater Education, Arts Therapy, Conducting, Music Librarianship SAMPLE OCCUPATIONS relating to this cluster: Music Educator, Performer, Music Therapist, Composer/Arranger, Actor, Technical Theater					
					 All Region Ensembles All State Ensembles 	

Post Secondary	Composition, Music Therapy, Theater, Theater Education, Arts Therapy, Conducting, Music Librarianship SAMPLE OCCUPATIONS relating to this cluster: Music Educator, Performer, Music Therapist, Composer/Arranger, Actor, Technical Theater					
		Co-Curricular Activities	• Musical • One Acts • Spring Play • Tri-M • Gospel Choir	 All Region Ensembles All State Ensembles Holiday Cabaret Steel Pan Ensemble 		
	Sen.	Career Exploration/ Internships	Hartt Partnership Opportunities	 Hartt Composition Project 		
		Further Opportunities for Study	 Private Lessons Simsbury Arts Academ Greater Hartford Acad (by audition) 			
		Community Connections	 Simsbury Arts Academy (SAA) Connecticut Children's Chorus (CCC) 	 The University of Hartford-Hartt School of Music Community Division 		
		Faculty & Staff Contacts	Angela Griffin, Director Arts Teachers: Rebecca Abel, Band; Dr. Stuart Yo Fausel, Orchestra; Ken F	Saltzman, Chorus; Lisa ounse, Theater; Kathryn		



The **Transportation/Automotive** cluster offers course work for students interested in pursuing a career in automotive, aviation, aerospace/astronautic, mechanical engineering, or engineering. By exploring and participating in the transportation strand, students will develop hands-on critical thinking, diagnostic, and problem-solving skills to prepare them for post-secondary study, especially in the fields that will depend on hands-on and advanced technological skills.

		d Elective Courses s Cluster		Other Suggested Classes
7/8	Unified Arts Rotation in Technology Education8th Grade Full Year Technology Education Electives			 AP Environmental Science Construction 1 or 2
9	Introduction to TransportAviation	ation		 Computer Science Manufacturing Enterprise PLTW Introduction to Engineering
10	 Introduction to Transportation Aviation Aerospace Education Automotive Technology 1 			DesignPLTW Principles of EngineeringPLTW Digital ElectronicsPLTW Engineering Design and
11	 Aerospace Education PLTW Aerospace Engineering Automotive Technology 1 Automotive Technology 2 			Development
12	 PLTW Aerospace Engineering Automotive Technology 2 Automotive Technology 3 			
Post Secondary	Engineering and Engineering Te manufacturing), Aerospace/Ast Technology SAMPLE OCCUPATIONS rela	echnology (mechanical, tronautic Engineering, T ating to this cluster:	civil, electrico Technology & Automotive	anology, Automotive Engineering, al,environmental, information systems, & Engineering Education, Agricultural Engineering, Automotive Service Astronaut, Spacecraft Designers
TE		Co-Curricular Activities	• FIRST Rob	potics
		Career Exploration/ Internships	• Internshij • Job Shado	-
	Further Opportunities for Study		Summer ur	niversity engineering programs
		Community Connections	Mentorsh Guest Spe	-
		Faculty & Staff Contacts	Dr. Wendy Ku, CTE Department Supervisor, James Compton, Technology & Engineering/PLTW Coordinator	
Care -			Teachers: (Warner	Cameron Bopp, David Salonia, Dan

Visual Arts

Visual Arts education at Simsbury High School offers a wide variety of courses to meet the interests and diverse needs of our art students. Imagination, problem solving, reflection and creativity are essential skills our graduates will need for the 21st Century and are embedded in the experiences students will have creating art and responding to art in their studio work. The art courses are intended for any student interested in art and design for a possible career, a post graduate portfolio, or enjoyment.

	Reco	ommended Elec in this Clus		irses	Other Suggested Classes
7/8	Unified Arts Rotation in Art			• Video	
	2D Strand	3D Strand		Design Strand	Production TV Production
9	Art 1 Art 1A	Art 1 Art 1A Jewelry and Glass 1 Ceramics and Sculpture 1		Art 1 Art 1A Digital Design 1	 Engineering Design Architecture
10	Drawing 1	Ceramics 2 Sculpture 2 Jewelry and Glass 2 Fashion Design		Digital Design 1 O Digital Design 2	Web DesignFilm Study
11	Drawing 2 Drawing 3 Painting 1 Painting 2 Adv. Observ. Drawing	Ceramics 2 Sculpture 2 Jewelry and Glass 2 O Portfolio Development		 Digital Design 2 Photography 1 Animation and Film 1 	
12	 AP Drawing Independent Study or Portfolio Development 	 C AP 3D Design Independent Study or Advanced coursework in 3-Dimensional Art Portfolio Development C AP 2D Design Animation and Film 2 Photography 2 Digital Design 2 Portfolio Development 			
Post Secondary	COLLEGIATE MAJOR relating to this cluster: Fine Arts, Fashion Design, Interior Design, Web Design, Graphic Design, Game Design, Curatorial/Gallery, Digital Editing, Animation, Exhibition/Display Design, Technical Theater/Set Design, Illustration, Costuming, Photography, Film/Video Broadcasting SAMPLE OCCUPATIONS relating to this cluster: Fine Artist, Museum Curator, Design Consultant, Illustrator, Graphic Designer, Art Teacher, Artisan, Animator, Photojournalist				
	- Inter - Inter	Activities	• Yearbo	,	
	- Practin - Develo - 9		• Theate	unities Interns tion Work • Comm r Work • Textile ne Design • Fashio	unity Partnerships
	Further Opportunities for StudySimsbury Arts Academy (SAA): Summer and af opportunities for study in the arts. (Brochures at the SAA website at www.simsbury.k12.ct.us/sat Hartford Academy of the Arts: Magnet school is specializing in the arts. CT School of Jewelry Arts				ochures are posted on ct.us/saa.) Greater et school in Hartford
		Community Connections	StudioCanton	Clayworks • New B Ameria	rt Ways Igton Valley Arts Center ritain Museum of can Art (NBMAA) ad Museum
		Faculty & Staff Contacts	Lavoie, T	Gagne, Supervisor of Art K-1 hea Ciciotte, Stephanie Lauret	

Gregory Gallo