

Table of Contents

Mission	2
Vision.....	2
Goals	2
Board of Education	2
BHS Administration.....	3
Guidance Counselors	3
Binghamton City School District	
NYS Diploma Requirements	4
Credit Requirements.....	4
BHS Course Offerings	5
Departments of Study	5
Marking System	5
Report Card Grades	5
Student Grade for Final Transcripts and Class Rank	6
Articulated Courses/Fast Forward—ATC	6
Course Level Designations	6
Schedule Changes/Dropping a Course.....	7
Programs of Interest at BHS:	7
Academic Intervention Services (AIS).....	7
The School of Freshman Studies.....	8
The Rod Serling School of Fine Arts.....	8
The College and Career Center	9
English as a New Language Program.....	9
P-TECH—Pathways in Technical Early College High School Program.....	10
Work-Based Learning: Internship (CTE)	10
Career and Technical Education (CTE)	11
Career Exploration Electives.....	12
International Baccalaureate— Diploma Program (IBDP)	13

Special Information Regarding the IB Program and Exams.....	14
International Baccalaureate Career-Related Program (IBCP).....	15
BHS Course Offerings.....	17
English	17
Mathematics.....	21
Science	26
Social Studies	35
World Language.....	41
English as a New Language Program	47
English as a New Language Grades 9-12	48
Physical Education and Health.....	49
Business, Finance & Information Technology	52
The Rod Serling School of Fine Arts	56
Theatre.....	57
Visual Arts.....	59
Music	64
Dance	68
Project Lead the Way Pre-Engineering & Technology.....	70
Family & Consumer Sciences (FACS)	73
Special Education Department	75
BOCES.....	77
BOCES Introductory Courses	78
BOCES Intermediate Courses	79
BOCES Advanced Placement Courses	80
New Vision Academics	81
Youth Apprenticeship Program	82

Mission

Our mission is to educate, empower and challenge all students to become productive, global citizens through innovative approaches to learning.

Vision

Embracing our diverse programs and community to become a premier public school district.

Goals

- All students will have the necessary skills and self-direction to enter college or start a career.
- All students will graduate.
- The Binghamton City School District will embrace diversity in all of its forms.
- The Binghamton City School District will provide safe and structured environments that ensure students' academic, social and emotional well-being.
- All stakeholders will consistently communicate, collaborate and engage with each other.

Board of Education

Mr. Brian Whalen, President
Mr. Evan McNamara, Vice-President
Mr. Joseph Gasior
Dr. Penelope Harper
Ms. Korin L. Kirk
Ms. Liz Rosenberg
Mr. John Weaver

Superintendent

Dr. Tonia Thompson

Assistant Superintendent for Instruction and Budget

Mrs. Karry Mullins

Assistant Superintendent for Personnel and Administration

Mr. Michael Holly

BHS ADMINISTRATION

Name	Position	Phone Number
Mr. Kevin J. Richman	Principal	762-8200
Ms. Dawne Anna-Adams	Associate Principal	762-8212
Mrs. Miriam Purdy	Associate Principal	762-8208
Mr. Eudes Clarke	Assistant Principal	762-8252
Mr. Dario Vasquez	Assistant Principal	762-8255

GUIDANCE COUNSELORS

Binghamton High School	
Derek Gouldin	762-8256
Glenn Whittington	762-8228
John Matyas	762-8227
Jennifer Farrell	762-8264
Matthew Roberts	762-8265
Kathryn Yezzi	762-8361
West Middle School	
Angela Briggs	763-8412
Amanda Oakley	763-8412
East Middle School	
Emily Tocheny	762-8320
Gina Turdo	762-8320

BINGHAMTON CITY SCHOOL DISTRICT
New York State Diploma Requirements

Local Diploma, Regents Diploma, Regents Diploma with Advanced Designation	
Course	Minimum Number of Credits
English	4
Social Studies Distributed as follows: U.S. History (1) Global History and Geography (2) Participation in Government (1/2) Economics (1/2)	4
Science Distributed as follows: Life Science Regents (1) Physical Science Regents (1) Life Science or Physical Science	3
Mathematics	3
Languages Other than English (LOTE) **	1
Visual Art, Music, Dance and/or Theater	1
Physical Education (Participation each semester)	2
Health	0.5
Electives	3.5
Total	22

Credit requirements

** Students with a disability may be excused from the requirement for 1 unit of credit in LOTE if so indicated on the IEP but must still earn 22 units of credit to graduate.
 Please consult your student's guidance counselor with any questions or for clarification.

BHS Course Offerings

The courses listed in this curriculum guide represent courses that we are prepared to provide our students. Final course offerings depend on course enrollments. Students will be notified in advance of the cancellation of any courses that they have signed up for.

Departments of Study

000 Series - English
100 Series - Social Studies
200 Series - Mathematics
300 Series - Foreign Language 400 Series - Science
500 Series - Business Education
600 Series - Industrial Arts/Technology and Home Economics
700 Series - Art 800 Series - Music
900 Series - Physical Education and Health 925 Series - Special Education
1000 Series - BOCES

Marking System

Each student at Binghamton High School will receive a report card at the end of each 10-week period during the school year. The student will receive a number grade for each subject area. To be placed on the Honor Roll, a student must achieve a weighted average of 87 or above. High Honor roll status can be attained by achieving an overall weighted average of 92 or above in all subjects recorded. To be an honor graduate, a student must achieve a weighted average of 87 or above. Class average is done in February of the senior year.

Report Card Grades

Key To Number Grades	Equivalent Letter Grades
92-100	A
89-91	B+
84-88	B
80-83	C+
74-79	C
70-73	D+
65-69	D
Below 65	F
Incomplete	I

At Binghamton High School, the teachers submit an Interim Report Form at the middle of each marking period. The purpose of this report is to inform the student and the parent/guardian of the student's progress prior to the actual report card. The Interim Report is submitted four times annually.

Student Grade for Final Transcripts and Class Rank

It is important for all student and parents at Binghamton High School to know that all classroom grades, no matter how or when earned during the course of the school year and/or summer school, become part of the official student record for transcripts, class rank, and Honor Graduate status. All grades and course scores are calculated in compiling a student's class rank and status for Honor Graduate. As an example, if a student fails a course/subject during the school year and re-takes that subject in summer school, both final marks for the school year and summer school are part of the official transcript record and are averaged in for final class ranking and Honor Graduate status. An earned grade "never disappears" on the final transcript. All grades/scores count on the official transcript record. Senior class rank is calculated at the end of the first semester, senior year, using weighted grades.

Articulated Courses/Fast Forward—ATC

Any course designated ATC (Articulated Courses) refers to an agreement between BHS and various colleges. Students are required to complete their studies in their chosen programs at BHS. Students may be granted college credit upon successful completion.

Students registered for a Fast Forward course are enrolled in the SUNY Broome course and students will earn transcribed credit. Students take on the responsibility and expectations of college level course work.

Course Level Designations

IB - International Baccalaureate

International Baccalaureate courses are open to all students who seek a challenging and rigorous academic program. Students must take an IB examination in May. The IB is recognized by major universities in North America as well as across the world. Students may earn college credit.

AP - Advanced Placement

The Advanced Placement program is open to any students, who seek a challenging academic program. The students will be prepared to take the AP Examination in the spring for possible college credit.

E or H – Enriched/Honors

These courses cover all the work required at the Regents level and satisfy the requirements for the state diploma or endorsement. The work covered is more intensified and personalized. The degree of the modification depends on the student population.

R - Regents

These courses are based on the state prescribed or state approved curricula. Their successful completion is required for a state Regents diploma or endorsement of the school district diploma. Credit weighting has been established for Binghamton High School. Credit weighting is used for the Establishment of the senior class rank and Honor Roll.

The following brief outline will explain the weighting system as applied to various course levels.

Credit Weighting

AP and IB	Final Class	1.15x
PTLW**	Average Equals	1.15x
Enriched/Honors	Average Equals	1.1x
ATC	Average Equals	1.1x
Regents	Weighted Class	1.0x

Schedule Changes/Dropping a Course

Planning a program of study each academic year is one of the most important tasks a student will complete. They will be guided by their parents, faculty, counselors and administrators. We want students and parents to be satisfied that they have made the best possible choices. Firm choices must be made when selecting courses during program planning. The master schedule is built on initial student requests. Once it is completed, it is extremely difficult to accommodate scheduling changes.

Changes for courses will only be made for the following reasons:

- Completion of summer school course work
- Failing scores in summer school course work
- Failure to complete a prerequisite
- Authentic, documented health reasons

Programs of Interest at BHS: Academic Intervention Services (AIS)

According to State Education Department regulations, each school district must develop and implement Academic Intervention Services (AIS) for students who do not currently, or who are at risk of, not meeting state standards. Academic Interventions are those services that are identified and implemented to help a student meet the various state standards.

Each district is charged with creating a continuum of services to meet the needs of all students. As a result, the level of services needed will be dependent on how far the student is from the state standards. The state has left it to each district to determine what those interventions should be. It is the district's responsibility to develop a procedure to identify students, track their progress and end services appropriately.

At Binghamton High School, any student who scored below the district-approved passing grade on any Regents examination required for graduation in English, mathematics, science, or social studies, is eligible to receive academic intervention services. In addition, a regular classroom teacher may recommend students for AIS services; however, the recommendation must go through guidance. As mandated by the state, the guidance counselor will notify parents by letter, inform students of services and schedule them into appropriate courses.

GRADE LEVEL CLASSIFICATION

TO BE PROMOTED		MINIMUM NUMBER OF CREDITS EARNED	ADDITIONAL CRITERIA	MINIMUM NUMBER OF REGENTS PASSED
From Grade	To Grade			
9	10	4.5	1 credit must be in English or Social Studies	1
10	11	10	A minimum of 1 credit in each of the core subject areas (English, Social Studies, Science, Mathematics and LOTE)	2
11	12	16	Eligible to be fully scheduled to meet NYSED graduation requirements June of the current school year	3

The School of Freshman Studies

The ninth grade is a pivotal year where suddenly students find themselves struggling to navigate large, impersonal, and competitive environments. Several strategies to improve student performance and decrease retention rates have emerged over the last few decades. One strategy we used to increase the success rate at Binghamton High School was to create the School of Freshman Studies (SFS). During the 2005-2006 school year, the SFS Academy emerged to the forefront after moving to the 3rd floor A building of Binghamton High School. This move was a crucial first step to creating a truly smaller learning community for our 9th-grade students. Before the 2016-2017 school year began, the SFS Academy moved to the 4th floor in order to rejuvenate our academic program and bolster student success. Since this time, the SFS Academy has continued to flourish as our 9th-grade teachers are able to individualize instruction and create personalized relationships with students.

The School of Freshman Studies curriculum is rigorous in nature and aligned to meet the values of the state standards.

School of Freshman Studies advantages:

- Smaller classes.
- The transition into Binghamton High School is eased by the creation of a smaller learning community.
- The teacher's classrooms are arranged by core content area.
- The teachers can plan similar themes to follow each curricular unit.
- The teachers can strategize plans for students on an individual basis as they get to know each student.
- Built-in time for community service opportunities.
- Administrative presence located within the academy in office B401.

School of Freshman Studies Administrative Contact—Mrs. Tia Rodriguez (607) 762-8255.

The Rod Serling School of Fine Arts

In 1995, The Rod Serling School of Fine Arts at Binghamton High School officially opened with a ceremony dedicating it to famed author Rod Serling, a '43 graduate of Binghamton Central High School. Since 1995, the school has averaged over 300 fine arts students per year. It exists in a comprehensive high school (Binghamton High School) of 1,500 students. Currently, the visual arts, dance, drama and the music department also offers the International Baccalaureate Program in their respective disciplines. Since its inception, it has become a model for fine arts education within New York State and in many districts throughout the nation.

A student at the Rod Serling School of Fine Arts can major in any of the following four areas: The visual arts, music, theatre, and dance. Within these areas, students can concentrate on individual interests and gear their study to those interests. For example, in the visual arts, students can concentrate in any of three areas: drawing and painting, photography and media, or ceramic and sculpture. In music, there are concentrations in vocal music, instrumental music, and music theory/composition. Theatre majors can specialize in stage, drama, or the musical theatre. While there are no specific concentrations in dance, the dance program touches upon every genre (ballet, modern, jazz, and ethnic dancing).

Course Offerings and Performance Groups

There are over 20 Fine Arts courses in the school of fine arts. There are no audition requirements or prerequisites for the foundation courses in any concentration. There are, however, prerequisites and auditions for some of the more advanced classes and performing groups.

There are over 12 performing groups in the school of fine arts. These include the Serling Players, the Rod Serling Dance Company, Concert Band, Wind Ensemble, Chorus, Concert Choir, Swing Choir, Davidge Choir, Women's Choir, Orchestra, and Chamber Strings, among others.

It is still worthwhile to take 1 or 2 courses even if you can't take the whole sequence. Ask your counselor!

The College and Career Center

High school students faced with the task of deciding what to do after high school are often confused and overwhelmed. The College and Career Center is a program that works closely with the guidance department to help students and their parents investigate the college and career bound options. The College and Career Center helps students with the admission process to maximize their chance of being accepted into the college of their choice and to set realistic goals in regard to backup colleges. If the student wants to pursue other educational alternatives such as trade schools, apprenticeships and vocational schools we can help them navigate the best path for them. The College and Career Center also helps students and their families with understanding how financial aid works and how to apply for it.

The purpose of the College and Career Center is simple; to help complete the connection between the student, the parent, Binghamton High School and the student's future education.

The College and Career Center is open every day and administered by Valerie Faughnan. Other times are available by appointment. Please call us at 762-8327.

English as a New Language Program

The primary instructional goal of the English as a New Language Program is to develop the ability of English Language Learners (ELLs) to read, write, speak and understand English so that they may successfully participate in both social and academic settings. The New York State Common Core State standards for English Language Arts (ELA) and Literacy and the New Language Arts Progressions as developed by the Office of Bilingual Education and World Languages, provide the foundation for the English as a New Language curriculum.

P-TECH- Pathways in Technical Early College High School Program

Binghamton High School has partnered with SUNY Broome, BT BOCES, and several area schools along with a number of industry partners to provide students with an opportunity to enter the Pathways in Technical Early College High School Program.

The P-Tech program is designed to provide a career pathway for economically and academically disadvantaged students in one of the quickly growing technical areas. All students must meet eligibility requirements and be selected through a competitive application process in their 8th grade year, and agree to partner with the P-TECH program for six years.

Students will begin earning their Regents Diploma and earn college credit from SUNY Broome in 9th grade by participating in after school and summer workshops. Students who remain with the program for the six years will earn an Associate's Degree and participate in ongoing one-on-one mentoring from specially selected professionals working with the industry partner organizations.

Work-Based Learning: Internship (CTE)

Internship / Career and Technical (CTE) (.5 Credit = 54 Hours) (1 Credit = 108 Hours)

Prerequisite: Evidence of participation in any CTE pathway program and career planning for the occupational focus or completion of high school coursework related to your occupational goal. Students must be 16 years of age or older. The CTE Internship is designed for students with career interests within the finance, business, culinary industry. Our interns will work with professionals in a field of interest in order to explore the discipline as a potential career. Students can earn graduation credit (based on hours worked) and valuable hands-on experience from completing an internship. Students also participate in the corresponding career prep seminar class that is held once a week and maintain a journal of their experience. A great resume enhancer and conversation piece during job interviews.

***** Students must apply by April. *****

One year or one semester; class meets once per week for career-related instruction.

Career and Technical Education (CTE)

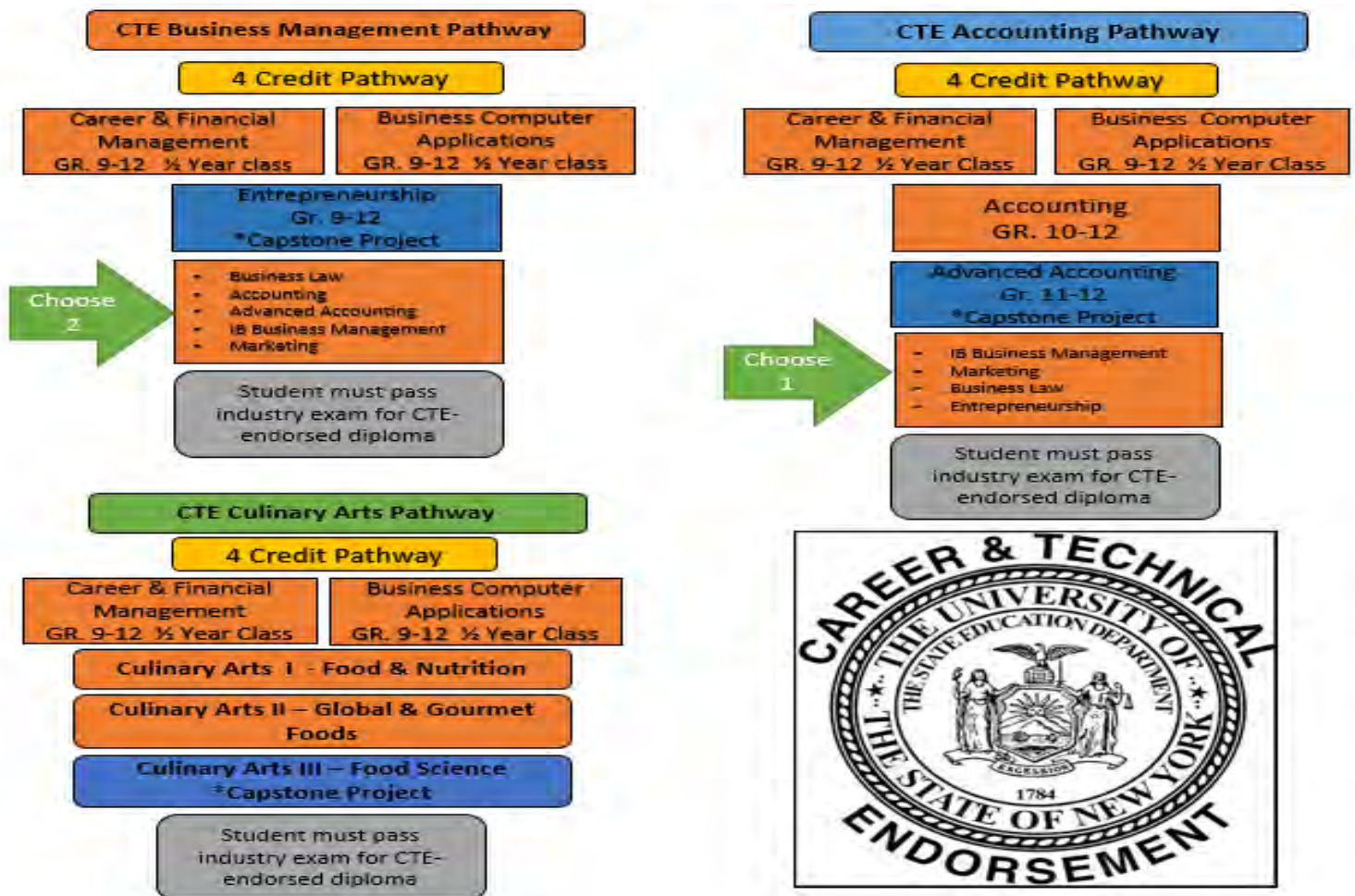
College and Career Readiness - Academic and Technical Skills - Work-Based Learning

Career and Technical Education (CTE) programs provide students with a foundation for a wide range of careers that reflect the contemporary workplace. In addition to taking college credit classes at no cost, the goal of CTE is to provide these students with an integrated educational sequence addressing life-long learning and the application of academic, vocational/technical, and career skills. New skills needed in the workplace - high level skills in communication, problem solving and critical thinking - are addressed by integrating college preparatory course work with a rigorous concentration of technical education.

Programs of study in business, accounting, and culinary arts can be followed by a post-secondary experience which leads to an associate degree. Students also have the option of obtaining a four year baccalaureate degree.

All Career and Technical Education Programs meet the NYS Regents requirements and offer rigorous and relevant choices in a student's selected career cluster/pathway.

Students who wish to receive a CTE Pathway Endorsement upon graduation, in addition to their Regents diploma, will need to take the following courses for the CTE area that they are interested in.



All CTE students who desire a CTE Pathway Endorsement will also be required to pass an Industry Based Assessment in one of the areas of study listed above and complete a Capstone Project. See your CTE teacher for details.

Career Exploration Electives

Binghamton City School District's Mission is to **educate, empower and challenge** all students to become productive, global citizens through innovative approaches to learning. At BHS we offer a wide variety of elective credit courses designed to offer students experience in a number of career clusters.

Business, Finance and Information Management	Health, Human Services and Natural Science
Career and Financial Management Business Computer Applications Accounting Accounting for a service Business (SUNY Broome credit) Entrepreneurship (SUNY Broome credit) Marketing Principles (SUNY Broome credit) Business Law Quantitative Business Methods (SUNY Broome credit) IB Business Management (SL) IBCP Personal and Professional Skills Economics Careers Fields Accounting, Banking, Entrepreneur, Grant Writer, Information Tech, Loan Officer, Advertising, Budget Analyst, Event Planner, Human Resources, Insurance Agent, Marketing Research Analyst, Appraiser, Business Owner, Financial Manager, Information, Security Investor, Technical Writer	Health Science Seminar Medical Terminology Anatomy and Physiology Forensics Culinary Arts, I, II, III Community Health Deliberation Child Development Early Childhood Education Psychology Environmental Science Careers Fields Chiropractor, Food and Beverage, Education, Community Health, Forestry and Conservation, Medical Technician Medical Practice, Nutrition, Pharmacy, Physical Therapy, Clean Energy, Research, Law Enforcement, Social Work
Consider including a World Language in your studies as you pursue your interests to help support your career choice. Careers in which strong world language skills are a plus include: international business, broadcast journalist, detective, diplomatic service officer, English as a foreign language teacher, international aid/development worker, logistics and distribution manager, marketing executive, patent examiner, sales executive, tour manager.	
Fine Arts, Media and Communications	Pre-Engineering and Technological Science
Dance Media I & II Photography Theatre Art Vocal Music Instrumental Music Careers Fields Recording and Producing, Performing, Songwriting /Composer, Illustrator, Photographer, Animator, Graphic Designer Game Designer, Interior Designer, Arts Administrator, Museum Director, Printmaker, Fine Artist, Architect, Actor, Stage Manager, Sound Designer, Television Production Assistant, Radio Presenter, Theater Director, Dance Teacher, Choreographer Dance Videographer, Costumer Clothing Designer, Music/ Art/Drama/ Therapist Conductor, Session Musician, Booking agent, Music Journalist, Fine Arts Teacher	Computer Science Design and Drawing for Production Computer Integrated Manufacturing Systems Principles of Engineering Engineering Design and Development College Physics Astronomy Careers Fields Advanced Manufacturing, Aerospace Engineering, Engineering Technology, Engineering Science, Information Technology, Physics Software Engineering/Designing, Bio Medical Engineering, Mining, Material Science, Computer Engineering, Telecommunications, Software Engineering

International Baccalaureate - Diploma Program (IBDP)

Open to students in Grades 11 and 12



The International Baccalaureate (IB) program is a comprehensive and rigorous two-year curriculum leading to examinations for students. The general objectives of the IB are to provide students with a balanced education, to facilitate geographic and cultural mobility, and to promote international understanding through a shared academic experience. In the more than 50 years since its founding, the IB Diploma has become a symbol of academic integrity and intellectual promise. The student who satisfies its demands demonstrates a strong commitment to learning, both in terms of the mastery of subject content and in the development of the skills and discipline necessary for success in a competitive world.

Students may select to do the full diploma or take any course to receive a certificate.

All IB Full Diploma candidates are required to take one subject from each of the groups. At least three and not more than four of the six subjects are taken at the Higher Level (HL), the others at the Standard Level (SL). Each examined subject is graded on a scale of 1 (minimum) to 7 (maximum). The award of the diploma requires a minimum total of 24 points and the satisfactory completion of three additional requirements: the Extended Essay, a research paper of some 4,000 words, which provides the first experience of the independent research paper; a course titled Theory of Knowledge (TOK), which explores the relationships among the various disciplines and ensures that students engage in critical reflection and analysis of the knowledge acquired within and beyond the classroom, the compulsory participation in CAS (Creativity, Activity, Service) extracurricular and community service activities. Bonus points may be awarded for the exceptional essay or performance in Theory of Knowledge.” (International Baccalaureate Publications)



The student who does not satisfy the requirements for the full diploma is awarded a certificate for the examinations completed.

In 1997, BHS was the third public high school in NYS accredited to offer the International Baccalaureate program to juniors and seniors. Each year, our IB program sends students to college or university, many with their freshman year already completed.

The IB curriculum consists of six subject groups. BHS offers courses in the following:

Language and Literature (Group 1):	English SL/HL
Language Acquisition (Group 2):	French SL/HL, Spanish SL/HL, Mandarin Chinese SL/HL
Individuals and Societies (Group 3):	History of the Americas HL, Philosophy SL, Business Management SL
Sciences (Group 4):	Biology SL/HL, Environment Systems and Societies SL, Chemistry SL
Mathematics (Group 5):	Mathematical Application SL, Mathematics Analysis SL
The Arts (Group 6):	Visual Arts SL/HL, Theatre SL/HL*
Required for Full Diploma:	Theory of Knowledge, CAS, Extended Essay

** The sixth subject may be selected from group 6 or from groups 1 to 4

Special Information Regarding the IB Program and Exams

1. To the best of our ability, International Baccalaureate Courses are placed in the existing schedule to accommodate the full-diploma student. As a result, students who want to take an IB course on a certificate basis may face scheduling conflicts with other courses. When a conflict occurs, the student must make the decision, with the counselor's guidance, as to what course best meets the academic needs of the student.
2. We encourage all students to challenge themselves academically and take at least one IB course. Students:
 - a. Receive 1.15 credit weighting for an IB course of study.
 - b. All students enrolled in an IB course of study are required to take the final exam in May as part of their final assessment.
 - c. Students must sign up for their IB examination in October.
3. Students will pay for the exam itself (approximate cost per exam \$119). The BCSD pays the registration fee for each student. If a student drops an IB course after being registered for the exam, the student/parent shall reimburse the district for the registration fee (approximate cost per registration \$172).
4. Students who do not sign up for their IB examination will remain in the class. However, the IB course they are enrolled in will be recorded on their transcript and report card as an "enriched/honors" level Course. Students will receive only 1.1 credit weighting.
5. In addition, students who do not complete all parts of the assessment or take the final exam will be placed in an "enriched/honors" level course with a 1.1 credit weighting.
6. Students are advised to check with the colleges to which they are applying. Not all colleges will grant credit to Standard Level (SL) courses.
7. Further information may be found at the website: <http://www.ibo.org>
 - a. Questions regarding the IB Diploma Program should be directed to James Gill, IBDP Coordinator at (607)762-6043 or (607)762-8242.

International Baccalaureate Career-Related Program (IBCP)

International Baccalaureate Career-related Program (IBCP) is an exciting 2-year program open to all juniors and seniors who are interesting in preparing for an engineering or business-related career while still in high school.

Students can choose from the following 3 approved IBCP programs:

1. **Project Lead the Way Pre-Engineering**
2. **Business and Finance**
3. **General Business**

Program requirements for the IBCP course of studies are as follows:

- Pass any 2 IB courses from the IB Diploma Programme at either the Standard Level or Higher Level, and pass their corresponding IB exams with a grade of 3 or higher.
- Complete the IBCC Core which consists of four components:
 - The Personal and Professional Skills (PPS), course which emphasizes the development of skills needed to successfully navigate higher education, the workplace and society.
 - The Language Development Requirement, which includes a Language Development Portfolio to show an improvement in language proficiency for a target language other than a student's mother tongue.
 - The Service Learning requirement, where students take a leadership role and work to create real change. This is completed within the ATL course.
 - The Reflective Project, which is an exploration of an ethical dilemma associated with the engineering or business field. This is completed within their senior elective-field course.



The International Baccalaureate Career-Related Certificate (IBCP) is a new IB initiative that aims to work with, and support, schools and colleges that wish to add an international dimension to their career-related courses. The IBCP is being introduced to enable more students to access, experience and benefit from an IB education.

Any BHS student is eligible to enroll in the IBCP Program in 11th and 12th grade. Students who are currently enrolled in or planning to enroll in our Personal and Professional Skills (PPS), Project Lead the Way Engineering (PLTW), and Business Department Curriculum make excellent IBCP candidates.

Upon successful completion of the IBCP, students will receive a Certificate of Programme Completion by the IBO.

Please see your guidance counselor for more information.

Overall, the IBCP is a blend of academic and career-related studies that:

- encourages international-mindedness
- instills the IB learner profile attributes
- promotes lifelong learning
- promotes mobility and flexibility
- gives alternative perspectives on education
- encourages experiential learning
- develops a broad range of transferable skills
- emphasizes participation in global community
- provides pathways to higher education and employment

Binghamton High School offers the following 3 pathway options for the International Baccalaureate Career-Related Programme (IBCP):

<p align="center">IBCP Pre-Engineering Pathway</p> <p>Prior to Junior Year: Design and Drawing for Production (DDP)</p> <p>By the end of Junior Year: Personal & Professional Skills (PPS) 11 Principles of Engineering (POE)</p> <p>Plus choose 1: Computer Integrated Manufacturing(CIM) or Digital Electronics (DE)</p> <p>By end of Senior Year: Engineering Design and Development (EDD) and Personal & Professional Skills 12</p>	<p align="center">IBCP Business and Finance Pathway</p> <p>Prior to Junior Year: Career and Financial Management (CFM) Business Computer Applications (BCA)</p> <p>By end of Junior Year: Personal & Professional Skills (PPS) 11 Accounting I</p> <p>Plus choose 1: Accounting II or Entrepreneurship</p> <p>Senior Year: IB Business Management Personal & Professional Skills (PPS) 12th</p>	<p align="center">IBCP General Business Pathway</p> <p>Prior to Junior Year: Career and Financial Management (CFM) Business Computer Applications (BCA)</p> <p>Prior to Junior Year: Personal & Professional Skills (PPS) 11 Entrepreneurship</p> <p>Plus choose 1: Accounting I Marketing Business Law</p> <p>Senior Year: IB Business Management Personal & Professional Skills (PPS) 12th</p>
---	--	--

In addition to choosing one of the above career-related studies, students must complete the IBCC Core:

- **IB Course Requirement:** Pass at least 2 IB courses, and score a 3 or higher on the corresponding IB Exams.
- **Community Service Project:** Complete a community service project while in the Personal and Professional Skills (PPS) beginning junior year.
- **Language Development:** Complete a Language Development Portfolio showing improvement in a language other than their mother tongue. It must consist of 3 sections: "Profile", "Experiences" and "Evidence".
- **Reflective Project:** Complete a Reflective Project that explores an ethical dilemma associated with their career-related issue and score a D or higher
 - Pre-Engineering students complete this during the Engineering Design and Development (EDD) course
 - Business students complete this during the IB Business Management course

Certification: Students who successfully complete the IBCP will receive the Career-Related Certificate of the International Baccalaureate and statement of results by July of their graduating year.

Questions regarding the IB CP Program should be directed to Steve McGovern, CP Coordinator at (607) 762-8158.

BHS Course Offerings

English

GOALS

The courses in English place emphasis on reading, writing, speaking, listening and critical thinking, with consideration given to the varying abilities and interests of students. By pursuing the required four-year program, it is hoped that students will be encouraged to grow in the skills, processes, critical thinking, and knowledge that will allow them to become successfully involved in an ever-changing world.

3000 English 9

1 Year

1 Credit

Grade Level: 9

Prerequisite: English 8

The English 9 course prepares students for the demands of high school reading and writing. Students read and interpret a wide range of text types and media, including short stories, nonfiction, poetry, and drama. Through discussion, collaboration, and frequent writing, students are supported to build on the skills learned in grades 6-8. Students will take the Regents exam during their junior year. **This course culminates with a local final exam.**

3001 Pre-AP English 9

1 Year

1 Credit

Grade Level: 9

Prerequisite: English 8

Department Recommendation: Grade above 75 in English 8, Proficient/Advanced reading benchmark score, and/or teacher recommendation.

This course is designed for ninth graders with a strong interest in English. Students will learn several frames for the critical analysis of authors' use of rhetorical strategies and techniques. Text selections and written tasks will introduce students to the goals of the AP Language and Composition course and assist them in deciding whether to take the full course in tenth grade. Students will take the Regents exam during their junior year.

This course culminates with a local final exam. Credit weighting of 1.1 is awarded after successful completion of course requirements.

0005 English 10

1 Year

1 Credit

Grade Level: 10

Prerequisite: Successful completion or concurrent enrollment in English 9/Pre-AP English 9

This course builds on the reading, writing, and thinking skills from English 9. Students work with literature and nonfiction texts to further explore how central ideas are developed through the use of literary elements and techniques. Particular emphasis is given to the review of research-based sources to analyze and respond to multiple positions and perspectives. Students will take the Regents exam during their junior year. **This course culminates with a local final exam.**

0004 AP English Language and Composition

1 Year

1 Credit

Grade Level: 10

Prerequisite: Successful completion of English 9/Pre-AP English 9

Department recommendation: Grade above 75 in English 9/Pre-AP English 9 and/or teacher recommendation

The AP English Language and Composition course provides students with intensive rhetorical analysis and writing curriculum. In preparation for the AP Language and Composition Exam, students will analyze and interpret samples of literature and non-fiction pieces drawn from a variety of time periods. Through collaboration and discussion, students evaluate, synthesize and cite research to support their arguments. Throughout the course students will move effectively through the stages of the writing process and develop stylistic maturity in their own writing. Students in this course are preparing to take the AP English Language and Composition exam and must sign up by mid-March. Teachers will provide relevant registration and fee information during the year. Students will take the Regents exam during their junior year. **This course culminates with a local final exam. Credit Weighting 1.15 awarded upon successful completion of required assessments.**

0036 IB (SL) English Language A Language and Literature

1 Year

1 Credit

Grade Level: 11

Prerequisite: Successful completion or concurrent enrollment in English 10 or AP Language and Composition



The IB SL English 11 program continues to develop students' skills in analyzing literature and mass media. The fundamentals of the Regents program will be addressed—skills in close-reading, supporting claims with evidence, and analyzing text structures—to prepare students for the Regents Examination in English Language Arts (ELA) as well as promote college and career readiness. Students will express knowledge and appreciation of various texts including works in translation. Students will complete a variety of papers and informal and formal oral presentations aligned with both Regents and IB English tasks. Students will have the option to finalize and submit assessments during the senior year for the chance to earn an IB SL certificate in English Language and Literature. **Students will continue preparation for the Regents Examination in English Language Arts required for graduation and will typically complete this exam in June. Credit Weighting 1.1 awarded upon successful completion of required assessments.**

0037 IB (HL) English Language and Literature 11

1 Year

1 Credit

Grade Level: 11

Prerequisite: Successful completion of English 10 or AP Language and Composition

Department Recommendation: Grade above 75 in English 10 or AP Language and Composition, and/or teacher recommendation



This course is appropriate for students who have previously completed enriched or Advanced Placement coursework in English and is an important pathway for full diploma candidate students. Similar to the IB SL English 11 course, IB HL English 11 emphasizes the critical analysis of literature and mass media. Students will engage with a broader variety of texts of all kinds at HL than at SL. Students will express knowledge and appreciation of various texts including works in translation. Students will complete additional written tasks informal and formal oral presentations. At the conclusion of IB HL English 11, students must have completed several required IB assessments: *Individual Oral Presentation Commentary, the Written Tasks I & II, and Further Oral Activities*. Students should plan to finalize and submit assessments during the senior year for the chance to earn an IB HL certificate in English Language and Literature. **Students will continue preparation for the Regents Examination in English Language Arts required for graduation and will typically complete this exam in January. Credit weighting of 1.15 is awarded only after successful completion of IB course components.**

0012 English 12

1 Year

1 Credit

Grade Level: 12

Prerequisite: Successful completion or concurrent enrollment in IB (SL/HL) English Language and Literature 11

This course offers students the opportunity to craft and revise personal essays and resumes appropriate for college or job applications during the first few weeks of the course. In addition, students will study a wide range of quality texts, engaging in analysis of autobiographical nonfiction, speeches, poetry, drama, and fiction and further develop their personal preferences in reading. Research is a major component of the course, engaging students in an inquiry-based process for exploring current events and topics of interest. **This course culminates with a local final exam.**

0038 IB (SL) English Language and Literature 12

1 Year

1 Credit

Grade Level: 12

Prerequisite: Successful completion of IB English Literature 11 (SL or HL) and associated IB assessments.

Department Recommendation: Teacher recommendation

Seniors are offered the second year of a two-year course focused on students' skills in the analysis of literature, mass media, and language. Year two of the course places emphasis on the critical study of literature. Students will work to analyze the various levels of meaning in a text. Students will engage in a variety of writing experiences including responses aligned with college-level research and analysis. Support is provided for students to revise and submit the required written task for the SL course as well as complete the taped Individual Oral Commentary. **In May, students should plan to take the IB SL exams in Language and Literature or local exams. Teachers will provide relevant registration and fee information during the year. Credit weighting of 1.1 is awarded only after successful completion of IB course components.**



0008 IB (HL) English Language and Literature 12

1 Year

1 Credit

Grade Level: 12

Prerequisite: Successful completion of IB (HL) English Language and Literature 11 and associated IB assessments. Department Recommendation: Teacher recommendation

Seniors are offered the second year of an intensive pre-University course emphasizing response to the study of literature, mass media, and language. Students will explore literary works in detail, seeking to understand the explicit and implicit meanings of text as well as the comparative analysis of sets of texts or extracts. A wide variety of writing experiences are required. Support is provided for students to revise and submit the required written tasks for the HL course as well as complete the taped Individual Oral Commentary. **In May, students should plan to take the IB HL exams in Language and Literature or local exams. Teachers will provide relevant registration and fee information during the year. Students may also elect to take the AP exam in literature. Credit weighting of 1.15 is awarded only after successful completion of IB course components.**



0055 Academic Literacy 9**1 Year****.5 Credit****Grade Level: 9****Prerequisite: None**

This class is designed to support students with reading comprehension and fluency skills. Students receive direct instruction and practice in using reading strategies and building their reading stamina. Support is provided for students to revise original pieces of writing and reinforce the skills needed for success at the high school level. **Students will receive a grade for this course.**

0053 Academic Literacy 10**1 Year****.5 Credit****Grade Level 10****Prerequisite: None**

This class is designed to help **all** students become strategic readers. Students receive direct instruction and practice in using reading strategies such as questioning, clarifying, summarizing and predicting. Support is provided for students to draft and revise original pieces of writing for different purposes, including tasks aligned with the ELA Regents Examination. Independent reading of high quality texts selected with students' interests in mind builds literacy skills and supports success in the core areas. Students will receive a grade for this course.

0054 Academic Literacy 11**½ Year****.5 Credit****Grade Level 11****Prerequisite: None**

Students will focus on skills needed to prepare for 21st century communication tasks as well as prepare to achieve mastery on the ELA Regents Examination. Students will learn specific strategies and skills needed in academic courses across the curriculum. Students will review the stages of the writing process and review the specific formats typical of a given content area. In addition, students will be supported to read a wide range of materials and practice specific strategies to develop and support claims in their written work. Students will receive a grade for this course.

0031 ELA Regents Review**½ Year****No credit****Grade Level: 12****Prerequisite: None**

Students will work on skills needed to achieve mastery on the ELA Regents Examination. Students will review previous exams and set goals for improvement. Support will be provided to help students break down and understand multiple choice questions and understand how to use graphic organizers and writing strategies to successfully respond to written tasks on the exam. Students will sit for the NYS Regents exam at the end of the course.

Mathematics

In order to graduate from high school in New York State, all students (with few exceptions) are required to pass the Algebra I Regents Exam. In addition, those students who wish to receive a higher level Diploma with Distinction, must also pass the Geometry Regents Exam and the Algebra 2 Regents Exam.

GOALS

The courses in the mathematics department are designed to develop mathematical skills and competencies so as to encourage students to further explore the field of mathematics.

Flowchart for New York State Regents Level Mathematics:

Regents Algebra I → Regents Geometry → Regents Algebra 2 → Higher Level Math

Courses below **not labeled** as Regents courses provide critical course content, **but do not culminate in a Regents exam.**

It is recommended that you purchase a calculator, in the TI84 family of calculators to use at Binghamton High School for all courses.

3200 Regents Algebra

1 Year

1 Credit

Prerequisite: Math 8

Department recommendation: Students who scored a Level 3 or Level 4 on the Math 8 assessment

This course emphasizes algebraic skills and prepares students for the Algebra I Regents exam. Units of study include real numbers, operations with monomials and polynomials, solving linear equations and inequalities algebraically and graphically, factoring, rational expressions, systems of equations, non-linear functions, radicals and right triangle trigonometry, set theory and probability, statistics and regression, linear and exponential functions, and graphs. **This course culminates in the Algebra 1 Common Core Regents Exam. Passing this exam with a score of 65 or higher is a graduation requirement for all students.**

3207 Regents Double Algebra

1 Year

1Credit

Prerequisite: None

Department Recommendation: Students who scored a Level 1 or Level 2 on the Math 8 state assessment.

This course is for students who scored a Level 1 or Level 2 on the Math 8 state assessment. This is a full year course that consists of two, 40 minute class periods a day. Topics include real numbers, operations with polynomials, solving linear equations and inequalities, systems, factoring, statistics, and graphing functions. **This course culminates in the Algebra 1 Common Core Regents Exam. Passing this exam with a score of 65 or higher is a graduation requirement for all students.**

0204 Regents Algebra Seminar**.5 Year or 1 Year****No Credit****Grade Level 10-12****Prerequisite: Previous enrollment in Regents Algebra I or Regents Double Algebra****Department recommendation: None**

This course emphasizes algebraic skills and prepares students for the Algebra 1 Regents exam. Units of study include real numbers, operations with monomials and polynomials, solving linear equations and inequalities algebraically and graphically, factoring, rational expressions, systems of equations, non-linear functions, radicals and right triangle trigonometry, set theory and probability, statistics and regression, plane and solid geometry. **This course culminates in the Algebra 1 Common Core Regents Exam. Passing this exam with a score of 65 or higher is a graduation requirement for all students.**

0232 Intermediate Algebra**1 Year****1 Credit****Grade Level: 10 or 11****Prerequisite: Previous enrollment Algebra 1****Department Recommendation: None**

This course is recommended for students, with previous exposure to algebra, who wish to continue their exploration of mathematics but may require additional time / preparation on various math topics. The course will review many of the algebraic skills that are required to solve equations and systems of equations, graph equations, quadratics and operations with polynomials. **This course culminates with a local final exam.**

0217 Geometry**1 Year****1 Credit****Grade Level: 10 or 11****Prerequisite: Regents Algebra or Double Regents Algebra****Department Recommendation: score 65 or higher on Algebra Regents.**

This course is recommended for those students who are interested in exploring the concepts of Geometry but who have demonstrated the need for extra assistance to be successful in Algebra. Units of study include geometric relationships, coordinate geometry, triangle properties and congruency, quadrilaterals, polygons, equations of circles, trigonometric functions, factoring, construction and 3-dimensional analysis. **This course culminates with a local Geometry final exam.**

0201 Regents Geometry**1 Year****1 Credit****Grade Level: 10 or 11****Prerequisite: Passed the Regents Algebra I exam****Department Recommendation: score 70 or higher on Algebra I Regents Exam or teacher recommendation.**

This course emphasizes and in depth study of all elements of the Geometry Regents exam. Units of study include Geometric relationships via plane triangles, properties of solids, coordinate Geometry, constructions, circles and transformational Geometry constructions. **The course culminates in the Regents Common Core exam. A 1.1 credit weighting will be an available option.**

0216 Foundations for College Math 1 Year**1 Credit****Grade Level: 12****Prerequisite: Passed Geometry and Algebra 2****Department recommendation: None**

This course is designed for high school seniors to ensure that students have the skills necessary to be successful in a college level math course. Topics covered include: math modeling using linear, quadratic, and exponential and trigonometric functions, number sense with a calculator, data analysis, working with polynomial and rational expressions and equations, application of right triangle trigonometry, exploring compound interest. This course also includes the following student success skills: note taking strategies, time management, and career exploration. **This course was developed in collaboration with SUNY Broome and will culminate with a local SUNY Broome final exam. Students, who pass this course with a final average of 70 or higher, will be exempt from having to take the SUNY Broome AC-CUPLACER exam.**

0206 Regents Algebra 2**1 Year****1 Credit****Grade Level: 11 or 12****Prerequisite: Passed the Geometry Regents Exam****Department Recommendation: score 75 or higher on Algebra 1 CC Regents and Geometry Regents**

This course is recommended for students who wish to continue their exploration into upper level mathematics. The course is an in-depth study of all elements of the New York State Algebra 2 Regents Exam. Units of study include higher order polynomials and factoring, rational expressions and equations, complex numbers, quadratic functions, systems of equations, relations and functions, exponents, logarithms, trigonometric functions and graphs, statistics, probability, and series and sequences. **This course culminates in the Algebra 2 Regents. Credit weighting of 1.1 will be an available option.**

0233 Personal Math**1 year****Grade Level 11 or 12****Prerequisite: None****Priorities to juniors and seniors****Department Recommendations: At least 2 credits of Math**

This course is designed to develop the skills and knowledge necessary to enable students to manage their personal financial affairs more effectively and to make informed consumer decisions. Possible topics include: learning how to budget their finances, saving, spending and investing their money, how to compare banking services, real estate transactions and income taxes. **This course culminates with a local final exam.**

0214 Advanced Placement Calculus AB 1 Year**1 Credit****Grade Level: 12****Prerequisite: Passed IB Mathematics I Course****Department Recommendation: None**

Topics covered in this course include limits and continuity, the derivative and techniques of differentiation, the mean value theorem, extreme problems, related rates, the fundamental theorem of calculus, the definite integral and techniques of integration, area and volume problems. Derivatives and integrals of various types of functions are studied, including polynomial, logarithmic, exponential, trigonometric and inverse trigonometric functions. **This course culminates in the AP Calculus exam. Students will receive 1.15 credit weighting upon successful completion of the course work and the AP exam. Students who do not complete these requirements will receive 1.1 credit weighting.**

0231 Computer Science I

1 Year

1 Credit

Prerequisite: Geometry or Regents Geometry

This is a course in structured programming using the Notepad++ programming language. Emphasis is on using the computer as a tool in problem solving. Topics include control structures, loops, user-defined functions, arrays, sequential search, bubble sorts, string manipulation, files, functions with parameters, menu driven programs, binary search and various sorting techniques. It will conclude with a project incorporating all of the techniques learned.

0210 IB Mathematical Application SL Year I

1 Year

1 Credit

Grade Level: 11 or 12, students may not enter as sophomore

Prerequisite: Passed the Geometry or Regents Geometry class

Department Recommendation: score 65 or higher on Regents Geometry class



This course is part I of a two year sequence which begins in the junior year and concludes with an IB examination offered during May of the second year. This course is designed for students who enjoy describing the real world and solving practical problems using mathematics, those who are interested in harnessing the power of technology alongside exploring mathematical models and enjoy the more practical side of mathematics. Units of study include polynomials and factoring, rational expressions and equations, radicals and complex numbers, solving quadratics algebraically and graphically, quadratic/linear systems, relations and functions, exponents, logarithms, trigonometric functions, trig graphs, and statistics.

Mathematical Application SL Year I culminates with a local final exam in June.

0215 IB Mathematical Application SL Year 2

1 Year

1 Credit

Grade Level: 11 or 12, students may not enter as sophomores

Department Recommendation: None

This course is year 2 of two year course. It is designed to provide additional mathematics background and experience for those planning to pursue study in such fields as education, finance, social science, health sciences, arts and the humanities. Topics include: probability, statistics, modeling and analysis, and financial mathematics. Introductory calculus is also explored. A focus of the course is an in-depth statistics project designed around the student's area(s) of interest. **In May, the student is required to take the IB Math Application final. Students will receive 1.15 credit weighting upon successful completion of their Internal Assessment (IA) and the IB Math Application final. Students who do not complete these requirements will receive 1.1 credit weighting.**

0212 IB (SL) Mathematics Analysis I**1 Year****1 Credit****Grade Level 11 or 12, students may not enter as sophomores****Prerequisite: Passed the Regents Algebra 2 Course****Department Recommendation: None**

IB Mathematics Analysis and Approaches year one begins in the junior year and concludes with an IB examination during May of the senior year. Numbers and algebra, Functions, Geometry and trigonometry, statistics and probability, and Calculus are divided between junior and senior year in this program. This course focuses on analytic methods with an emphasis on calculus- appropriate for pure mathematicians, engineers, scientists, economists, and those with an interest in analytic methods. This course is aimed at students who will go on to study subjects with substantial mathematics content such as mathematics itself, engineering physical sciences, or some economics courses.

0213 IB (SL) Mathematics Analysis II**1 Year****1 Credit****Grade Level: 11 or 12****Prerequisite: Passed the Regents Algebra 2 Course****Department Recommendation: None**

IB Mathematics Analysis and Approaches year one begins in the junior year and concludes with an IB examination during May of the senior year. Numbers and algebra, Functions, Geometry and trigonometry, statistics and probability, and Calculus are divided between junior and senior year in this program. This course focuses on analytic methods with an emphasis on calculus- appropriate for pure mathematicians, engineers, scientists, economists, and those with an interest in analytic methods. This course is aimed at students who will go on to study subjects with substantial mathematics content such as mathematics itself, engineering physical sciences, or some economics courses.

Seniors enrolled in IB Mathematics Analysis II are required to take the IB Math Analysis exam. Students will receive 1.15 credit weighting upon successful completion of the course work and the IB Math Analysis exam.

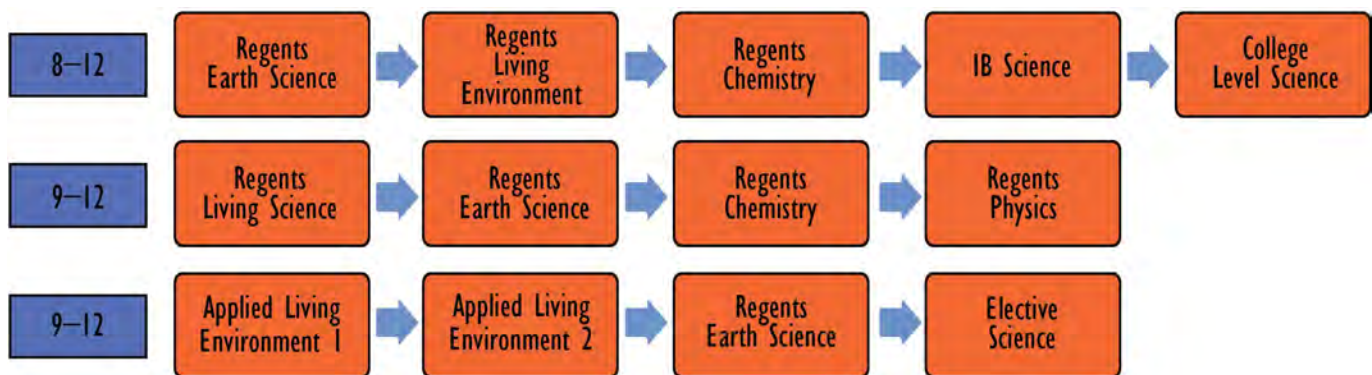
0237 SAT Mathematics**.5 Year****.5 credit****Grade: 11 or 12****Prerequisite: 2 math credits****Department Recommendation: None****Priorities: 1st semester – seniors preparing for fall SAT/ACT, juniors preparing for Spring SAT/ACT**

This course is a math elective and cannot be used toward New York State requirements for math credits. It is designed for students who want to improve their SAT/ACT Reasoning test scores and to prepare for the college entrance exams. Instruction includes strategies to logically approach the mathematical section of the test. Students will also review arithmetic, algebraic, and geometric concepts, theory, further their reasoning abilities to solve word problems and become familiar with the test format. Class work and participation are an essential part of the course. Students **must** remain in the course for the entire semester to receive credit. **This course culminates with a local final exam.**

Science

In keeping with Binghamton City School District's Mission to **educate, empower and challenge** all students to become productive, global citizens through innovative approaches to learning the BHS Science department seeks to provide students the necessary skills and self-direction to enter college or start a career. We provide a diverse offering of programs that are not only focused on content but provide 21st-century science skills while allowing students to practice abstract reasoning, collaboration and problem solving. The integration of technology and flexibility for each learner in a dynamic learning environment will help each student meet his or her potential and find success for the future.

Possible Paths to meeting Science requirement:



Passing a minimum of three Science courses including one Living Environment and one Physical Setting is a requirement for Graduation.

Passing a minimum of one Science Regents exam is required for graduation.

3401 Regents Living Environment

1 Year; 1 Class period, lab every other day

1 Credit

Grade Level: 9

Prerequisite: Successful completion of Science 8

Department Recommendations: Greater than 50 scale score on grade 8 exam or passed Earth Science Regents

This course provides a core of broad, general understanding of the fundamentals of biology and an extension of these understandings in several specific areas. This New York Regents course may be used to earn a credit for a Regents Diploma. Students learn proper laboratory techniques in the use of the microscope and in dissections of representative specimens while attaining an appreciation for the beauty of many of the life forms that share our planet. Among the topics covered are: The Study of Life, Maintenance in Plants and Animals, Reproduction and Development, Genetics, Evolution and Ecology. Extended areas of study include: Biochemistry, Human Physiology, and Modern Theories of Evolution.

New York State requires successful completion of twenty hours (1,200 minutes) of laboratory instruction before a student can take the New York State Earth Science Regents examination in June.

3403 Applied Living Environment (Year 1)**1 Year; 1 Class period****1 Credit****Grade Level: 9****Prerequisite: Teacher and department recommendation****Department Recommendations: None**

This two year Regents course is designed for students who have struggled with science in the past despite consistent efforts. Students will spend more time on required concepts including; The Nature of Science, Maintenance in Plants and Animals, Ecology and Human impact. Areas of study include: Skill Building and lab work including Laboratory Techniques and Experimental Design will be practiced over the two years preparing students for success on the Living Environment Regents in year two.

3404 Applied Living Environment (year 2)**1 Year; 1 Class period, lab every other day****1 Credit****Grade Level: 10****Prerequisite: Previous Enrollment in Applied Living Environment (Year 1)****Department Recommendations: None**

This Regents level course is the second year of a two year course. This year focuses on core content including Biochemistry, Reproduction and Development, Genetics, Evolution Human Physiology, and Modern Theories of Evolution as well as lab experience essential for success on the Living Environment Regents.

New York State requires successful completion of twenty hours (1,200 minutes) of laboratory instruction before a student can take the New York State Earth Science Regents examination in June.

0400 Regents Earth Science**1 Year; 1 Class period, lab every other day****1 Credit****Grade Level: 10-12****Prerequisite: None****Department Recommendations: None**

This Regents level course encourages students to use scientific processes to investigate their surroundings. Extensive laboratory exercises use the students' life experiences and natural surroundings to help provide a better understanding of the planet Earth and its place in the universe. The course is organized into these areas: Astronomy, Geology, Meteorology, Geologic History, and Physical Oceanography. The Earth science program also investigates aspects of how man affects the environment. **Sitting for the Regents exam is a course requirement.**

New York State requires successful completion of twenty hours (1,200 minutes) of laboratory instruction before a student can take the New York State Earth Science Regents examination in June.

0404 Regents Chemistry

1 Year; 1 Class period, lab every other day 1 Credit

Grade Level: 10-12

Prerequisite: Successful completion of Living Environment and Algebra

Department Recommendations: Greater than 75% on Living Environment Exam and passing Algebra Regents

This Regents level course provides students with a fundamental knowledge of chemistry and chemical processes that are an important asset to all BHS graduates and citizens of the 21st century. In this course we present the basic concepts and relationships of chemistry in an engaging and interactive forum. Students will demonstrate understanding, reasoning and problem solving abilities as they explore chemistry by inquiry, investigation and group collaboration. **Sitting for the Regents exam is a course requirement.**

New York State requires successful completion of twenty hours (1,200 minutes) of laboratory instruction before a student can take the New York State Regents Chemistry examination in June.

0407 Regents Physics

1 Year; 1 Class period, lab every other day 1 Credit

Grade Level: 10-12

Prerequisite: Successful completion of Living Environment and Algebra Regents. Passed or taking Geometry. Department Recommendations: Greater than 75% on Living Environment Exam and passing Algebra Regents.

In this Regents level course you will be exposed to various types of technology used in collecting real experimental data, as well as conduct a variety of experimental investigations to answer real questions...and have a lot of fun in the process! Topics include classical Newtonian Mechanics, Waves, Electricity, Magnetism, and Modern Physics. **Sitting for the Regents exam is a course requirement.**

New York State requires successful completion of twenty hours (1,200 minutes) of laboratory instruction before a student can take the New York State Regents Physics examination in June.

0410 Environmental Science

1 Year; 1 Class period

1 Credit

Grade Level: 10-12

Prerequisite: None

Department Recommendations: Passed Living Environment or Earth Science Regents

Environmental Science is an elective, non-Regents science course for students who have successfully concluded a minimum of one Science Regents and have an interest in pursuing careers in fields related to environmental problems or in developing skills that will enable them to alleviate personal and community environmental problems. Topics covered will include: Appropriate Technology, Water, Air and Terrestrial Pollution, The Effects of Man on the Natural Environment, Waste Treatment and Disposal, Organic Farming and the Misuse of Pesticides and Fertilizers, Population Controls in Relation to Natural Resource Management and Food Production, Energy Management, Outdoor Pursuits and Recreation. Activities will include lecture, class discussion, individual investigations, field trips, outdoor experiences, and term papers.

0409 Real World Science**1 Year; 1 Class period****1 Credit****Grade Level: 10-12****Prerequisite: None****Department Recommendations: Passed Living Environment or Earth Science Regents**

Students will explore how STEM techniques (Science, Technology, Engineering, and Mathematics) are used in real world situations. Necessity, knowledge, perseverance and skill all lead to inventions, innovations and discovery. After learning a set of techniques and practice experiments, students will use their skills to invent, innovate and discover a topic of their choice. Collaboration with community members and/or community based projects will be encouraged. Research can be conducted in any field of science, but students will be expected to consult with outside experts and literature to gain a better understanding of their project. Participation in the local science fair will be strongly encouraged.

0443 Earth Science Regents Exam Prep**.5 Year; 1 Class period****No Credit****Grade Level: 10-12****Prerequisite: Must have met the 1200 minute lab requirements**
Department Recommendations: Completion of Earth Science course

This course is designed to prepare students who have met the lab requirement but failed the Regents Exam. Students will practice test taking skills along with focusing on core content. Students are expected to be taking a second science required for graduation in addition to this course. Students will sit for the NYS Regents exam at the end of the course.

0431 Regents Living Environment Regents Exam Prep**.5 Year; 1 Class Period****No Credit****Grade Level: 10-12****Prerequisite: Must have met the 1200 minute lab requirement****Department Recommendations: Completion of Living Environment course**

This course is designed to prepare students who have met the lab requirement but failed the Regents Exam. Students will practice test taking skills along with focusing on core content. Students are expected to be taking a second science required for graduation in addition to this course. Students will sit for the NYS Regents exam at the end of the course.

0445 Anatomy and Physiology ATC**SUNY Broome: BIO 101****1 Year; 1 Class period****1 Credit****Grade Level: 11-12****Prerequisite: Successful completion of two Science Regents Courses****Department Recommendations: 75% or greater on Living Environment Regents exam and one additional Regents. Passed Algebra Regents, passed or taking Geometry**

This non-Regents (dual enrollment) college course through SUNY Broome's Fast Forward Program is designed and intended for juniors and seniors who have an interest in health-related occupations, apprenticeship programs, medical or health technology programs, or just an interest in taking an up-to-date course about the human body. This course reviews each of the major body systems. Students will also be introduced to the structures and processes of cells, and various tissue types present in the human body. **Students selecting this course should be capable of dealing with complex vocabulary and extensive factual information. This course would be valuable for any student planning to attend a community college in any health-related field.**

0428 Astronomy: Discovering the Stars, Galaxies and the Evolution of the Universe

.5 Year; 1 Class period

.5 credits

Grade Level: 11 or 12

Prerequisite: None

Department Recommendations: 75% or greater on a science regents exam and passed 1 additional science course.

This non-Regents course is designed to be an inquiry based experience whereby you, the student, will learn the basics of stellar and galactic Astronomy and at the same time develop a better understanding of our origins, place in the universe, and our possible future.

The course will have 2 major units of study, one every marking period. Each unit has between 4 and 6 sub topics.

Unit 1: Understanding Astronomy – Discovering the Night Sky, Tools of Astronomy, and the Nature of Light.

Unit 2: Understanding the Solar System – Terrestrial Planets, Gas Giants, Dwarf Planets and the Sun. Each unit will have various components built in to promote student achievement such as, but not limited to, unit exams, presentations and projects, laboratory work (real and virtual), problem sets, online participation, and interactive clickers in class.

This course can be taken before or after *Astronomy: Discovering the Night Sky, Observational Astronomy and Exploring the Solar System*.

0421 Astronomy: Discovering the Night Sky, Observational Astronomy and Exploring the Solar System

.5 Year; 1 Class period

.5 credits

Grade Level: 11 or 12

Prerequisite: None

Department Recommendations: 75% or greater on a science regents exam and passed 1 additional science course.

This non Regents course is designed to be an inquiry based experience whereby you, the student, will learn the basics of historical, observational, and solar system Astronomy and at the same time develop a better understanding of our origins, place in the universe and historical ideals leading to our current view of the universe.

This course has 2 major units of study, one every marking period. Each unit has between 4 and 6 subtopics.

Unit 1: Understanding Stars – Stellar Distance, Processes, and Evolution.

Unit 2: Understanding the Universe – The Milky Way, Other Galaxies, Cosmology and Astrobiology.

0425 College Physics 1 and 2 ATC**SUNY Broome: Physics 161 and Physics 162****1 Year; 1 Class period, lab every other day 1 Credit****Grade Level: 11-12 (10 with Department recommendations) Prerequisite: Successful in Living Environment and Algebra****Department Recommendations: 75% or greater on the Living Environment and Algebra Regents exams; Passed or taking Geometry**

This is a (dual enrollment) college course through SUNY Broome's Fast Forward Program. Binghamton High School students receive both high school and college credit simultaneously. Students will discover the answers to many "how come" questions, as we gain an understanding of nature, the universe, and technology at the most fundamental scientific level - Physics. This Physics course is designed to be equivalent to the first year of an introductory college-level algebra-based physics course. The first half of this course is dedicated to the study of Classical Mechanics which includes: Kinematics, Projectile Motion, Newton's Laws, Circular Motion, Gravitation & Kepler's Laws, Work & Energy, Momentum & Impulse and Torque & Rotational Dynamics. The second semester we will study Electricity & Magnetism, Waves, Simple Harmonic Motion, Optics, Relativity, as well as Modern & Nuclear Physics. Problem solving skills learned in physics will help in other courses. Laboratory experiences provide problem solving techniques, measurement skills and applications of theory.

0455 Forensic Science**1 Year; 1 Class period****1 Credit****Grade Level: 11-12****Prerequisite: Passed one Regents Science course****Department Recommendations: 75% or greater on Science Regents exam**

This non-Regents Forensic Science course is a yearlong course designed to introduce the scientific and investigative techniques used to solve a crime. The course focuses on the evaluation of techniques, strategies, tools and terminology of modern forensic analysis. Emphasis will be placed on the methods that link suspect, victim, and crime scene.

We will also examine career paths in expert fields such as Crime Scene Investigator, Crime Lab Analyst, Firearms examiner and Forensic Odontologist, Serologist, Toxicologist and Psychologist. Major topics include evaluating and processing a crime scene, collecting and preserving evidence, DNA fingerprinting, blood spatter analysis, fingerprint analysis, time of death and forensic entomology, hair and fiber analysis, forensic anthropology, ballistics, and document analysis.

We will engage in collaborative activities, laboratory work, on-line activities and professional visits as part of this course, as well as case studies and crime scenarios.

Some course material will be graphic! You will be required to submit a signed permission form from your parent or guardian confirming permission to view material covered in class.

0429 Medical Terminology ATC 1 Year; 1 Class period**1 Credit****Grade Level: 11-12****Prerequisite: Successful completion of two Science Regents Exams. Department Recommendations: 75% or greater on Living Environment Regents exam**

This is a (dual enrollment) three-credit college course through SUNY Broome's Fast Forward Program. Binghamton High School students receive both high school and college credit simultaneously. Students who take this course will likely have an interest in the health care field. A study of the language of medicine, including suffixes, prefixes and root words with an emphasis on terminology associated with the anatomic system is studied in-depth.



0402 IB SL Biology

1 Year; 1 Class period, lab every other day

1 Credit

Grade Level: 11-12

Prerequisite: Regents Living Environment and a second Regents level course Department

Recommendations: 75% or greater on Regents exams

This course is designed to be the equivalent of a college introductory level biology course. Students will take the **IB Biology SL** exam given in May of their first year.

The goals of this course are:

- To provide students with a body of biological knowledge and the methods used to apply this knowledge to current issues relating to science and technology.
- To develop experimental and investigative scientific skills and an appreciation of science as a process.
- To raise an awareness of the moral, social, economic and environmental implications of using science and technology on a global scale.

IB (SL) Biology topics include cell and molecular biology, biochemistry, genetics, ecology and conservation, evolution, human anatomy and physiology.

Approximately 40 hours of the course will consist of rigorous labs (practical investigation) including 10 hours devoted to a Group 4 research project. The project can provide physics, environmental systems and biology students an opportunity to interact and investigate a problem of their choice.

Students enrolled in the IB Biology course of study are required to sit for the IB Biology exam given in May of their first year. Students may also elect to challenge the AP Biology examination at the completion of IB (HL) Biology.

If students challenge the SL IB Test in year 1, then they must complete the IB Biology IA (an independent science experiment with complete lab paper) in year one.

0403 IB (HL) Biology

1 Year; 1 Class period, lab every other day

1 Credit

Grade Level: 12

Prerequisite: Successful completion of IB SL Biology

Department Recommendations: 75% or greater on Regents exams

IB (HL) Biology is a rigorous pre-university course of study encompassing both junior and senior years.

The general aims of the course are:

- To provide a body of knowledge and methods (facts, principles and processes) which characterize science and technology.
- To develop an understanding of the means by which biological information is collected, analyzed, evaluated and synthesized.
- To develop experimental and investigative scientific skills.
- To understand that scientific study and creativity are human endeavors with social consequences within the global context.

The curriculum includes molecular and cellular biology, genetics, photosynthesis and respiration, human physiology, infectious disease and immunity, classification and diversity, evolution, plant science and ecology and conservation, Neurobiology and Animal Behavior.

This course will provide 240 hours of instruction throughout the junior and senior years of study as well as 60 hours of practical lab investigations. Additionally 10 hours of group project work is required for IB candidates.

This project will be of student design and investigation.

**Students will complete the IB Internal Assessment (IA) for Biology at the conclusion of the project which will be submitted to IB headquarters for assessment.

**Please note that the Group 4 project is always done in year 1 (SL) (junior or senior) for anyone testing that year, The IA is usually done in year 2 (HL) for the two-year students, unless the student is taking only the SL (one year), then they must complete the IA in year 1.



0405 IB SL Chemistry

1 Year; 1 Class period, lab every other day

1 Credit

Grade Level: 11-12

Prerequisite: Successful completion of Regents Chemistry

Department Recommendations: 75% or higher on Regents exams

IB (SL) Chemistry will challenge you to not just learn facts but how to investigate chemical principles and design your own experiments in the laboratory. The goal of the course is to provide a body of knowledge and methods (facts, principles and processes) which the student will use to collect, analyze, and evaluate a variety of labs. Student input will be strongly encouraged in laboratory investigations.

Topics covered include matter and energy, atomic structure, chemical bonding, the periodic table, kinetics and equilibrium, acids and bases, electrochemistry, organic chemistry and nuclear chemistry. In addition to the basic material, the students will decide two additional topics they wish to cover from a number of options.

This course will provide 150 hours of instruction as well as 30 hours of laboratory investigations. An additional 10 hours of group project work is required for IB candidates. This project will be of students' design and investigation. At the conclusion of the project, it will be submitted to IB Headquarters for assessment.

0406 IB (HL) Chemistry

1 Year; 1 Class Period, lab every other day

1 Credit

Grade Level: 12

Prerequisite: Successful completion of IB SL Chemistry

Department Recommendations: 75% or higher on Regents Exams

IB (HL) Chemistry is for students who intend to major in engineering or medicine. The International Baccalaureate HL Chemistry course is an advanced course in Chemistry which covers the same material as any college chemistry course. The goal of the course is to provide a strong knowledge of the basic facts, principles and processes associated with Chemistry as well as provide you with an experience based education involving the investigative process used in laboratories today by allowing you to design your own experiments and carry them out (safety permitting.) You will learn how chemical information is collected, analyzed, evaluated and synthesized and develop experimental and investigative skills that will be useful in college as well as in a career in science. Student input will be strongly encouraged in laboratory investigations.

Topics covered include matter and energy, atomic structure, chemical bonding, the periodic table, kinetics and equilibrium, electrochemistry, organic chemistry, nuclear chemistry, the mole, colligative properties, kinetic theory of gases, redox, acid-base theories and thermodynamics will be covered. In addition to the basic material, the students which decide with two additional topics they wish to cover from a number of options.

This course will provide 240 hours of instruction as well as 50 hours of laboratory investigations. An additional 10 hours of group project work is required for IB candidates. This project will be of students design and investigation. At the conclusion of the project, it will be submitted to IB headquarters for assessment.



0411 IB Environmental Systems and Societies

1 Year; 1 Class period, lab every other day

1 Credit

Grade Level: 11-12

Prerequisite: Successful completion of two Regents Science courses

Department Recommendations: 75% or greater on the Living Environment Regents

The course is a transdisciplinary subject which combines the techniques and knowledge of the experimental sciences with the theories and concepts relating to nature and societies. Because it is an interdisciplinary course, students can study ESS and have it count as either a group 3 or a group 4 course, or as both, in the IB program. The curriculum is designed to stimulate and challenge students who want to think constructively and creatively about their world, and have demonstrated a high degree of motivation and preparation.

This course is taught over one year and covers 8 major topics: Foundations of environmental systems and societies, Ecosystems and ecology, Biodiversity and conservation, Water and aquatic food production systems and societies, Soil systems and terrestrial food production systems and societies, Atmospheric systems and societies, Climate change and energy production, Human systems and resource use. Each topic involves some laboratory activities as well as a substantial amount of reading and writing. In addition, each student is required to design, develop and carry out an independent investigation into an environmental issue of their choice and report their findings in a 1,500 to 2,250 word document. There is one required field trip which takes place during one entire school day.

0441 Health Series Seminar– ATC

SUNY Broome HST 100

1 Year

1 Credit

Grade level 10-11

Prerequisite: Successful completion of one Science Regents course

Department Recommendations: Interest in the Health Care Field

This is a dual enrollment college course through SUNY Broome's Fast Forward Program. This course is designed for motivated students who have a strong interest in the Health Science field. The focus will be an in-depth exploration of health related careers and development of personal success strategies designed to prepare students for success academically, professionally and personally.

From the SUNY Broome Official College Catalog:

Upon successful completion of this course the student will be able to:

1. Describe how conscious control of thought processes impacts habits, attitudes, beliefs, and expectations.
2. Explain how habits, attitudes, beliefs, and expectations impact personal performance.
3. Establish achievable personal goals based on individual roles and responsibilities.
4. Identify and list personal barriers to success.
5. Apply the affirmation process toward achieving established goals.
6. Evaluate the effectiveness of the process in achieving established goals.

Note: This is an elective course and will NOT earn science credit toward graduation requirements.

Social Studies

GOALS

In keeping with Binghamton City School District's Mission to educate, empower and challenge all students to become productive, global citizens through innovative approaches to learning the goal of the Social Studies Program is to teach the student how to function effectively in our democratic society to become productive global citizens. Upon completion of the program, the young adult should be a person who can demonstrate the ability to make rational and informed decisions about the economic, social and political questions confronting our society and the world in the 21st century. Such decisions will draw upon the lessons of history and the social sciences. The development of civic values consistent with life in a democratic system is an overriding goal of the entire program. The Social Studies Program is designed to help the student acquire the knowledge, skills, and attitudes needed for responsible citizenship. The program emphasizes the development of critical thinking and clear oral and written communications skills.

New York State requires that students take four required units of social studies in a sequential order. These courses are Global History and Geography 9 and 10, United States History and Government, Participation in Government, and Economics. Students must pass a New York State Regents Examination at the end of Global History and Geography and United States History and Government. A five-year sequence may be earned by completing one additional unit of credit in elective courses such as IB Philosophy or Psychology

Possible Paths to meeting Social Studies requirement:



3100 Global History and Geography 9

1 Year

1 Credit

Grade Level: 9

Prerequisite: None

Department Recommendations: None

This course follows a chronological format, emphasizing the development of man's political, economic, geographic and social institutions. European, African, Asian, and Latin American histories are studied through their cultural heritages, conflicting ideologies and ever-changing characters, from the formation of early civilization through the Age of Enlightenment.

3102 Global History and Geography 9 Pre AP

1 Year

1 Credit

Grade Level: 9

Prerequisite: None

Department Recommendations: Class average of 75% or greater and/or teacher recommendation.

This course is designed for honor students in social studies and involves outside reading and development of critical thinking and writing skills. It follows a chronological format, emphasizing the development of man's political, economic, geographic and social institutions. European, African and Asian histories are studied through their cultural heritages, conflicting ideologies and ever-changing characters, from the formation of early civilizations through the Age of Enlightenment.

0102 Global History and Geography 10

1 Year

1 Credit

Grade Level: 10

Prerequisite: Successful completion of Global History and Geography 9 or concurrent enrollment

Department Recommendation: None

This course focuses on the modern world after 1789. Events are studied through conflicting ideologies and ever-changing geopolitical patterns. Understanding of concepts associated with the modern world is reinforced through the application of various skills developed in previous social studies courses. Passing the Global History and Geography Regents exam is required for graduation.

0136 AP European History

1 Year

1 Credit

Grade Level: 10

Prerequisite: Successful completion of Global History and Geography 9 Pre AP or teacher recommendation

Department Recommendation: None

AP European History is designed to be the equivalent of a two-semester introductory college or university European history course. In AP European History students investigate significant events, individuals, developments, and processes in four historical periods from approximately 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing historical evidence; contextualization; comparison; causation; change and continuity over time; and argument development. The course also provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction of Europe and the world; poverty and prosperity; objective knowledge and subjective visions; states and other institutions of power; individual and society; and national and European identity.

This course is designed for students who wish to be introduced to college-level work in the tenth grade. Students taking AP EURO must take the AP EURO Exam to receive weighted credit. **Students are also expected to take the Global History and Geography Regents exam in June.**

0106 United States History and Government 11

1 Year

1 Credit

Grade Level: 11

Prerequisite: None

Department Recommendation: None

This course is about understanding the political debates, conflicts and socio-economic forces that have shaped the United States. Our nation's motto is "E Pluribus Unum:" "Out of many, one." Americans are a people whose descendants have come from all corners of the globe. Throughout its history, the United States has struggled to create a unified national identity out of the racial, ethnic, religious, and regional diversity of the nation.

This course is a survey of the general trajectory of American history and of the basic structure of the U.S. government. Major units of study include the Colonial period, the American Revolution, the U.S. Constitution, the Civil War, Reconstruction, Westward Expansion, the Gilded Age, the Progressive Era, imperialism, World War I, the Twenties, the Great Depression, World War II, the Cold War, Civil Rights, Vietnam and Contemporary Politics. The class will explore several deep historical questions that span multiple units.

0107 Economics

.5 Year

.5 Credit

Grade Level: 12

Prerequisite: None

Department Recommendation: Successful completion of Global History and Geography, and U.S. History and Government.

This course provides students with the economic knowledge and skills that will enable them to function as well-informed and economically literate citizens in our society and world. Students will learn about the American economic system, their role within that system, and how the United States fits into the broader world economy. The class seeks to strike a balance between personal finance and basic micro- and macroeconomics. Topics of study include economic thinking skills, supply and demand, business structures, monetary and fiscal policies, the stock market, and consumer economics. Passing Economics or an equivalent course is a New York State graduation requirement.

0108 Participation in Government

.5 Year

.5 Credit

Grade Level: 12

Prerequisite: None

Department Recommendation: Successful completion of Global History and Geography, and U.S. History and Government.

This course prepares students to be well-informed and responsible American citizens. They will learn about both the rights and responsibilities of citizenship. Students will have the opportunity to become actively involved in the political process as they explore contemporary federal, state and local policy issues. Through these issues, they will learn about the vital roles that citizens play in our democratic system. ***In order to receive course credit, students are required to complete at least ten hours of community service during the semester in which they take the course. Passing Participation in Government or an equivalent course is a New York State graduation requirement.***

0110 Psychology

.5 Year

.5 Credit

Grade Level: 9-12

Prerequisite: None

Department Recommendation: This course is primarily for juniors and seniors

Psychology is a 20 week elective course in which basic concepts and theories will be explored. There will be an attempt to cover the following topics: approaches to psychology, cognitive processes, human development, personality, psychological disorders and self and social influences. The course lends itself to discussion and active participation; a willingness to engage with the teacher and classmates is one key to success in the class. The course is primarily for juniors and seniors and is worth a .5 credit upon successful completion.

The IB Program

0104 IB (HL) History of the Americas I

1 Credit

Grade Level: 11

Prerequisite: None

Department Recommendation: Successful completion of Global History and Geography

10 OR AP World History, with at least a 75% on the Global History and Geography Regents Exam



Built upon the foundations begun in Global or European History, students will explore their own historical heritage in relation to the American community at large. At the same time, the course attempts to view American history from international perspectives as well. The course will demonstrate the value of cultural diversity as exemplified by the American civic mandate, E pluribus, unum- out of many, one. The course is organized into roughly chronological units that simultaneously provide a broad survey of American history while also using more detailed case studies to focus on persistent topical themes. Assuming the role of young historians, students will practice making analytical, reasoned judgments about the past and effectively communicating them through writing and public speaking. Using numerous collegiate structures and assessments, the course guides students through the study of political, diplomatic, cultural, social, and economic history. In this course, students not only wrestle with the facts of history, but also explore the historiographical issues behind various interpretations of the past. A heavy emphasis is placed on the development of analytical reading and writing skills as students learn to deconstruct a wide variety of primary and secondary sources. They are taught to clearly and coherently explain and apply their ideas and theories about the past.

Students will be required to complete a summer assignment prior to the start of the course in September. Students will satisfy state requirements by passing the NYS Regents examination in U.S. History and Government. Students have the option to take the AP U.S. History examination as well. Finally, students will complete a graded rough draft of the IB Internal Assessment. This will be further revised in the fall of senior year.

Students receive 1.15 credit weighting for an IB course of study, provided that they submit a draft of their internal assessment in March and/or sit for the AP U.S. History exam in May. Students who fail to do this will received only 1.1 credit weighting.

0105 IB (HL) History of the Americas II (HL)

1 Year

1 Credit

Grade Level: 12

Prerequisite: History of the Americas I

Department Recommendation: None



This course involves a detailed study a limited selection of twentieth century world history. Major topics to study include (1) causes, practices, and effects of war; (2) the rise and rule of single-party states; (3) the Interwar Period; (4) the Cold War. Examination of the topics involves a holistic approach, with political, diplomatic, and economic issues integrated into the course wherever appropriate. Students will also learn to evaluate, interpret, and use source material critically as a historical source.

By the end of their senior year, students will have become aware of the international context in which they live, encountered the major issues of the contemporary world, acquired a greater understanding of the work of the historian and of the historical process, and be more knowledgeable of their national heritage. Students who elect to take this course will be required to sit for the higher level IB History examination in May. The exams consist of material from topics covered in both years of IB History.

0112 IB (SL) Philosophy

1 Year

1 Credit

Grade Level: 11-12

Prerequisite: None

Department Recommendation: None



This is a pre-college course that challenges students to think at a higher level. The core themes of this course are, "What Is a Human Being?," "Contemporary Social Issues," and "the Philosophy of Religion." Various readings, class discussions and audio/visual works will be used to address these themes. There is a final exam and one essay that must be submitted to the I.B.O. The essay will be a critical analysis that relates to one of the core themes studies in class. The essay needs to be 1,600 words.

"Philosophy deals with the issues that are profound, usually difficult and important for humanity. I.B.O. Philosophy aims to be inclusive and deal with a wide range of issues that can be approached in philosophical way. The emphasis of I.B.O. Philosophy is very much on doing Philosophy. Doing Philosophy requires intellectual rigor an open and critical mind, and willingness to attempt to understand alternate views. One of the challenges of philosophy is for candidates to become aware of their own bias and of others. At the core of philosophy lies a concern with truth and clarity of understanding achieved through critical and systematic thinking, careful analysis of arguments and close reading. Every human being everywhere in the world can engage in a dialogue with living philosophers and the great philosophers of the past. This dialogue creates a tradition, a context in which philosophy as an activity is undertaken without constraints of time or place. Thus, philosophy is not just an international activity. It is beyond internationalism, and fosters tolerance by transcending ethnic and religious boundaries." (Philosophy Curriculum Guide, International Baccalaureate Organization, February, 2000.)

0024, 0025 Theory of Knowledge

1 Year course for IB students running from January of junior year to January of senior year

1 Credit

All IB Diploma candidates must take Theory of Knowledge

Prerequisite: None

Department Recommendation: None



“TOK is an International Baccalaureate course designed to stimulate critical reflection upon the knowledge and experiences acquired both inside and outside the classroom, to evaluate the basis of knowledge and experiences, and to develop a personal mode of thought based on critical examination of evidence and argument.” (International Baccalaureate Booklet)

The focus of TOK will be on the student’s inquiry into what he/she knows and how he/she comes to know it. It will explore the various Ways of Knowing - language, reason, sense perception, emotion, imagination, faith, intuition, memory - as well as the separate areas of Knowledge-mathematics, natural and human sciences, history, ethics, religious and indigenous knowledge systems and the arts. Students will engage in examination of their perspectives, beliefs, and thoughts through class discussion and written argument. The content of the course is the various subject areas of the student’s education. The process of the course is student reflection on what the student claims to know and what is professed as knowledge by others. The goals of the course are to challenge the student’s existing knowledge and assumptions and to encourage the student to relate his/her developing understanding to issues and problems of importance in the world.

Course requirements: an open mind; a series of 250-500 word essays; one 1,200-1,600 word externally assessed essay; a class presentation and written self-evaluation.

0034 IB Extended Essay

No Credit Pass/Fail

Grade Level: 11-12

All IB Diploma candidates must complete the IB Extended Essay

Prerequisite: IB Diploma Candidate

Department Recommendation: None



The Extended Essay is an independent study project, completed by IB Diploma candidates, involving an essay of 3500-4000 words to be completed by January of a student’s senior year. This work is done under the supervision of a teacher-mentor and may be done in any of the IB subject area courses. The IB Coordinator must approve all topics before the essay is begun.

World Language

GOALS

The study of a second language is an essential component in the total school curriculum. It strengthens the development of basic skills and it provides a powerful experience in developing the reasoning ability for students. When students study another culture, they not only broaden their horizon in cross-cultural understanding of both the oneness and the uniqueness of various societies but also gain a deeper concept of self and an appreciation for their own culture.

Binghamton High School proudly offers courses of study in the following languages: Spanish, French, Arabic, Sign Language and Mandarin.

0307 Spanish I

1 Year

1 Credit

Grade Level: 9-12

Prerequisite: None

Level I represents the beginning phase of learning a foreign language. The students are exposed to topics in conjunction with checkpoint A of the New York State Syllabus. The students will be exposed to all four skills: listening, speaking, reading and writing, with emphasis on vocabulary, culture, and basic communication skills.

0308 Spanish II

1 Year

1 Credit

Grade Level: 9-12

Prerequisite: Spanish I

This is the second year of language study in a sequential program and the first year of checkpoint B in the New York State Syllabus. The four basic skills are developed and improved with more emphasis on grammar and writing. Upon successful completion of the course, students will be at an Intermediate language level.

0309 Spanish III Enriched

1 Year

1 Credit

Grade Level: 10-12

Prerequisite: Spanish II

This is the third year of sequential language program that will reward students with a Regents credit with successful completion of the course and final exam.

Spanish 3 is designed for highly motivated students who want to be challenged with the curriculum, as there is an increasing emphasis on advanced grammar, speaking, writing and reading. Students will be working on Pre IB Spanish skills and the class will be predominantly taught in the target language. It assumes that the students have completed a Level II course and are at a novice-low level of proficiency and is designed to encourage growth and the ability to learn independently.

The successful completion of each quarter will result in the student's average being weighted by 1.1.

0312 IB Spanish B (SL)

1 Year

1 Credit

Grade Level: 11-12

This is a college level course in which the students will work toward improving language skills in the following areas: listening comprehension, reading comprehension, oral expression and written communication. A wide variety of literary and cultural topics from various Spanish-speaking countries will be used.



Cultural similarities and differences will be explored through reading activities and class discussions. The class will be held entirely in the target language and students are expected to speak in Spanish to the best of their ability.

0313 IB Spanish B (HL)

1 Year

1 Credit

Grade Level: 11-12

Prerequisite: IB Spanish B (SL)



This is a college level course which continues and refines skill development. A variety of texts from various Spanish-speaking countries will be used. Students will work toward increasing the ability to discuss and analyze literary, cultural and contemporary topics in both written and oral forms. The class will be held entirely in the target language and students are expected to speak in Spanish at all times. These students will take the IB examination in May for an International Baccalaureate diploma or certificate.

*Students may also elect to challenge the AP Spanish examination after taking this course.

0334 Spanish Heritage

1 Year

1 Credit

Grade Level: 9-12

Prerequisite: None

This course is designed for native Spanish speakers to improve and strengthen reading and writing skills in their language. The goal of this class is to improve and enhance the students understanding and grades in their other core subjects.

A variety of texts from various Spanish-speaking countries will be used. Students will work to increase their ability to discuss and analyze literary, cultural and contemporary topics in both written and oral forms. The class will be held entirely in the target language and students will be expected to speak in Spanish at all times.

*The running of Spanish Heritage is contingent on minimum enrollment to be determined annually. If enrollment is low, the district will make all efforts to run the course the following year.

0322 Spanish Credit Recovery

.5 Year

1 Credit

Grade Level: 10-12

Prerequisite: None

This course is designed for students in grades 10, 11 or 12 who attempted to complete Spanish I in high school and were not successful. To be eligible for Credit Recovery a student must have earned seat time in a Spanish class in high school and failed the course.

This will be a computer based class that will provide students the opportunity to work at their own pace. Students will determine the pace of each unit of instruction with successful completion of each computer unit. Students may complete the course mid-year if all requirements are met. Students will have the opportunity to seek extensive one on one attention from the instructor to successfully achieve one credit of language instruction required for graduation.

*The running of Spanish Credit Recovery is contingent on minimum enrollment to be determined annually. If enrollment is low, the district will make all efforts to run the course the following year.

0300 French I**1 Year****1 Credit****Grade Level: 9-12****Prerequisite: None**

Level I represents the beginning phase of learning a foreign language. The students are exposed to topics in conjunction with checkpoint A of the New York State Syllabus. The students will be exposed to all four skills: listening, speaking, reading and writing, with emphasis on vocabulary, culture and basic communication skills.

0301 French II**1 Year****1 Credit****Grade Level: 9-12****Prerequisite: French I**

This is the second year of language study in a sequential program and the first year of Checkpoint B in the New York State Syllabus. The four basic skills are developed and improved with more emphasis on grammar and writing. Upon successful completion of the course, students will be at an intermediate language level.

0302 French III Enriched**1 Year****1 Credit****Grade Level: 10-12****Prerequisite: French II**

This is the third year of sequential language program that will reward students with a Regents credit upon successful completion of the course and final exam.

French 3 is designed for highly motivated students who want to be challenged with the curriculum, as there is an increasing emphasis on advanced grammar, speaking, writing and reading. Students will be working on Pre IB French skills and the class will be predominantly taught in the target language. It assumes that the students have completed a Level II course and are at a novice-low level of proficiency and is designed to encourage growth and the ability to learn independently.

The successful completion of each quarter will result in the student's average being weighted by 1.1.

0305 IB French B (SL)**1 Year****1 Credit****Grade Level: 11-12****Prerequisite: This course is for students who have successfully completed French 3**

This is a weighted college level course. This is the first year of a two year program. The student will work toward improving language skills in the following areas: listening comprehension, reading comprehension, oral expression, and written communication. The student will be using a variety of texts from Francophone countries. Cultural similarities and differences will be explored through reading activities and class discussions. Students who complete this course may continue on to Advanced French in their senior year.



0306 IB French B (HL)

1 Year

1 Credit

Grade Level: 12

IB French B (SL)

This is a weighted college level course. This is a continuation and refinement of skill development. Students will work toward increasing the ability to discuss and analyze literary, cultural and contemporary topics in both written and oral forms. Students who successfully complete the two year IB program will be prepared to communicate in French in a variety of contexts. They will gain a strong foundation for the continued study of French at the university level and/or use of the language in professional, personal or recreational circumstances.

* Students may elect to challenge the AP Examination after taking this course.

0325 American Sign Language I

1 Year

1 Credit

Grade Level: 9-12

Prerequisite: None

American Sign Language is a language used by d/Deaf people and the d/Deaf community in America, Canada, as well as other countries. It uses its own rules for grammar structure and syntax. It is a language composed of five parameters: hand shapes, movements, facial expression, eye contact, and overall body language. In our ASL course we will be discussing Deaf culture and Deaf History, as well as learning to communicate using sign language.

0337 American Sign Language II

1 Year

1 Credit

Grade Level: 10-12

Prerequisite: American Sign Language I

This is the second year of language study in a sequential program and thus is similar to Level I. The course includes a more in-depth study of ASL grammar, translations and language analysis. In ASL II students will learn about the deaf culture, social and behavioral norms. The course will also study moments that have been instrumental in Deaf History. Lastly, the students will increase their ability to converse in ASL with more fluency and spontaneity.

0342 American Sign Language III

1 Year

1 Credit

Grade Level: 10-12

Prerequisite: American Sign Language II

This is the third year of language study in a sequential program and thus is similar to Level II. The course includes a more in-depth study of ASL grammar, translations and language analysis. In ASL III students will learn about the deaf culture, social and behavioral norms. The course will also study moments that have been instrumental in Deaf History. Lastly, the students will increase their ability to converse in ASL with more fluency and spontaneity.

0326 Mandarin I

1 Year

1 Credit

Grade Level: 9-12

Prerequisite: None

Mandarin I represents the beginning phase of learning a foreign language. The students are exposed to topics in conjunction with a checkpoint A level of the New York State Syllabus. The students will be exposed to all four skills: listening, speaking, reading and writing. The majority of the time will be centered on the skills of speaking and listening.

0339 Mandarin II
1 Year
1 Credit
Grade Level: 10-12
Prerequisite: Mandarin I

This course is the second year of language study in a sequential program and thus is similar to Level I. The four basic skills are developed and improved.

0341 Mandarin III
1 Year
1 Credit
Grade Level: 10-12
Prerequisite: Mandarin I and II



This is the third year of sequential language program that will reward students with a Regents credit with successful completion of the course and final exam.

Mandarin 3 is designed for highly motivated students who want to be challenged with the curriculum, as there is an increasing emphasis on advanced grammar, speaking, writing and reading. The class will be predominantly taught in the target language. It assumes that the students have completed a Level II course and are at a novice-low level of proficiency and is designed to encourage growth and the ability to learn independently. The successful completion of each quarter will result in the student's average being weighted by 1.1.

0345 IB (SL) Chinese B: Mandarin
1 Year
1 Credit
Grade Level: 11-12
Prerequisite: This course is for students who have successfully completed Mandarin 3



This is a college level course in which the students will work toward improving language skills in the following areas: listening comprehension, reading comprehension, oral expression and written communication. A wide variety of literary and cultural topics from various Mandarin-speaking countries will be used. Cultural similarities and differences will be explored through reading activities and class discussions. The class will be held primarily in the target language and students are expected to speak in Mandarin to the greatest of their abilities.

*The running of IB Mandarin IV is contingent on minimum enrollment to be determined annually. If enrollment is low, the district will make all efforts to run the course the following year.

0347 IB Chinese B: Mandarin (HL)
1 Year
1 Credit
Grade Level: 12
Prerequisite: IB Chinese B: Mandarin (SL)

This is a weighted college level course. This is a continuation and refinement of skill development. Students will work toward increasing the ability to discuss and analyze literary, cultural and contemporary topics in both written and oral forms.

Students who successfully complete the two year IB program will be prepared to communicate in Mandarin in a variety of contexts. They will gain a strong foundation for the continued study of Mandarin at the university level and/or use of the language in professional, personal or recreational circumstances.

*Students may elect to challenge the AP Mandarin examination after taking this course.*The running of IB Advanced Mandarin is contingent on minimum enrollment to be determined annually. If enrollment is low, the district will make all efforts to run the course the following year.

0344 Arabic I
1 Year
1 Credit
Grade Level: 9-12
Prerequisite: None

Arabic I represents the beginning phase of learning a foreign language. The students are exposed to topics in conjunction with a checkpoint A level of the New York state syllabus. The students will be exposed to all four skills: listening, speaking, reading and writing. The majority of the time will be centered on the skills of speaking and listening. *The running of Arabic is contingent on minimum enrollment to be determined annually. If enrollment is low, the district will make all efforts to run the course the following year.

0346 Arabic II
1 Year
1 Credit
Grade Level: 10-12
Prerequisite: Arabic I

This course is the second year of language study in a sequential program and thus is similar to Level I. The four basic skills are developed and improved.

*The running of Arabic II is contingent on minimum enrollment to be determined annually. If enrollment is low, the district will make all efforts to run the course the following year.

0331 Arabic III
1 Year
1 Credit
Grade Level: 10-12
Prerequisite: Arabic I and II

This is the third year of sequential language program that will reward students with a Regents credit upon successful completion of the course and final exam.

Arabic III is designed for highly motivated students who want to be challenged with the curriculum, as there is an increasing emphasis on advanced grammar, speaking, writing and reading. The class will be predominantly taught in the target language. It assumes that the students have completed a Level II course and are at a novice-low level of proficiency and is designed to encourage growth and the ability to learn independently. The successful completion of each quarter will result in the student's average being weighted by 1.1.

*The running of Arabic III is contingent on minimum enrollment to be determined annually. If enrollment is low, the district will make all efforts to run the course the following year.

English as a New Language Program

GOALS

The primary instructional goal of the English as a New Language Program is to develop the ability of English Language Learners (ELLs) to read, write, speak and understand English so that they may successfully participate in both social and academic settings. The New York State Common Core state standards for English Language Arts (ELA) and Literacy and the New Language Arts Progressions as developed by the Office of Bilingual Education and World Languages, provide the foundation for the English as a New Language curriculum.

Assessment/Testing

Following identification using the HLQ and the interview, the student may then be administered the initial assessment; the New York State Identification Test for English Language Learners (NYSITELL) by qualified district personnel to determine his/her level of English Language Development.

Placement

There are five levels of English Language Development. A student identified as “Commanding/Proficient” on the NYSITELL may enter the general education program. A student identified as an English Language Learner will be described as follows: Entering, Emerging, Transitioning, Expanding. ELLs will be assigned to English as a New Language (ENL) classes taught by a certified teacher of English to Speakers of Other Languages (ESOL). These courses are organized according to students’ English Language Development levels and the following grade bands: 9-10 or 11-12. Students will also be placed in an Integrated ENL/Core Content class. The Integrated ENL/ Core Content class is co-taught by the ESOL teacher and the core content (English/Humanities/Math/Science) teacher or by a teacher that holds dual certification in teaching ESOL and the core subject.

Annual Assessment/Testing

Ongoing placement is determined by the student’s performance on standardized assessments including the New York State English as a Second Language Achievement Test (NYSESLAT). A student within two years of exiting ELL status is referred to as a Former English Language Learner, and is required to receive instruction that supports language development and academic progress during that two-year period. Former ELLs are also entitled to all testing accommodations afforded English Language Learners under New York State regulations.

**1/2 unit of services that monitor and support language development and academic progress as approved by the Commissioner may substitute for Integrated English as a New Language for Former ELLs.*

ENGLISH AS A NEW LANGUAGE GRADES 9-12

Level of English Language Development	Units of Instruction	English as a New Language (Stand-alone) Elective credit	Integrated English as a New Language and ELA 1 ELA credit	Integrated English as a New Language and content area other than ELA 1 content area credit
<i>Entering</i>	3	Minimum 1 unit Option for 1 additional unit	Minimum 1 unit Option for 1 additional unit	Option for 1 additional unit
<i>Emerging</i>	2	Minimum .5 unit Option for .5 additional unit	Minimum 1 unit Option for .5 additional unit	Option for .5 additional unit
<i>Transitioning</i>	1	Option for .5 unit	Option for .5 unit	Option for .5 unit
<i>Expanding</i>	1		Minimum 1 unit	Minimum 1 unit
<i>Commanding</i> <i>(Students may place at this level upon entry or Former ELLs may achieve this level and require ENL services for 2 years following exit from ELL status)</i>	.5 unit*		Option for .5 unit	Option for .5 unit

Physical Education and Health

GOALS

The Physical Education and Health Education Departments will prepare the students at the Binghamton City School District to effectively meet and adjust to the demands of a changing society. We will work within the following learning Standards established by the New York State Education Department.

Physical Education

The broad purpose of education is to expand and guide the development of the behavior patterns, so that the student may mature to the limits of their mental and physical potential.

Physical Education is that portion of the education process which utilizes physical activity as a primary means of influencing the psychological, intellectual, and social, as well as physical development of the individual to effectively meet and adjust to the demands of a changing society. In essence, Physical Education is the study, practice, and appreciation of the art and science of human movement.

Course Requirements

Credit: All students enrolled in Binghamton High School must successfully complete four years of Physical Education for a total of 2 units of credit, 5 credit per year.

Attendance: All students are required to participate in all of their Physical Education classes. All classes must be made-up or credit for that class is lost.

Effort and Attitude: While engaged in an activity, all students should participate to the best of their ability using those skills introduced by the instructor. The teacher should also take into consideration the students' relationship toward the activity and their peers. Performance standards for Physical Education will be used to evaluate effort and attitude during class.

Course Selection

During the school year all students are required to complete one unit in each of the following areas:

1. Rhythms
2. Team Sport
3. Conditioning

0900 Physical Education

1 Year

.5 Credit

Grade Level: 9-12 Prerequisite: None

This is a coeducational, activity oriented course in which build up skills. Team games and lifetime sports are the primary emphasis. It is required that each student will successfully complete four years of this course.

0904 Training in physical and mental development.

1 Year

1 Credit

Grade: Level: 9-12

Prerequisite: None

This class is designed to provide guidance and training in physical and mental strength. Students will work with certified coaches to learn how to engage in a regular routine of weight training. Coaches will use sports specific knowledge in all aspects of this course. Weight training is combined with the use of

Yoga to support an understanding of the power breathing and mindfulness.

Students are also expected to participate in regular classroom instruction that:

- Explores racial and gender stereotypes
- Teaches the science that connects physical health with mental well-being as a strategy for managing stress.
- Provides academic support too holistically develop the student.

This class takes place in the weight room as well as in a classroom setting. This is an elective pass/fail class. **This does not qualify for a PE credit.**

0908 Health Education

.5 Year

.5 Credit

Grade Level: 11-12

Prerequisite: None

Health Education will stress the skills of health education and the promotion of a healthy lifestyle. The major purpose of the course is to increase health literacy and improve student outcomes. Standard skills in an authentic, real world situations for personal growth and as well as our community.

0910 Health Education Enriched (Community Health Deliberations)

.5 Year

.5 Credit Health credit

Grade 11-12

Prerequisite: None

Community Health Deliberations will focus on skill development in health education and the deliberation process. Students will focus on personal and community health issues and learn how to deliberate to solve community based health issues. Students will practice and develop health education and deliberation skills. From the deliberations participants will move to action with project based learning for our school or community at large. Students will need to have good communication skills as well as reading, text analysis and be self-motivated.

This course receives credit weighting of 1.1.

0911 Fast Forward Personal and Community Health

.5 Year

.5 Credit (.5 Health credit & 3 college credit hours)

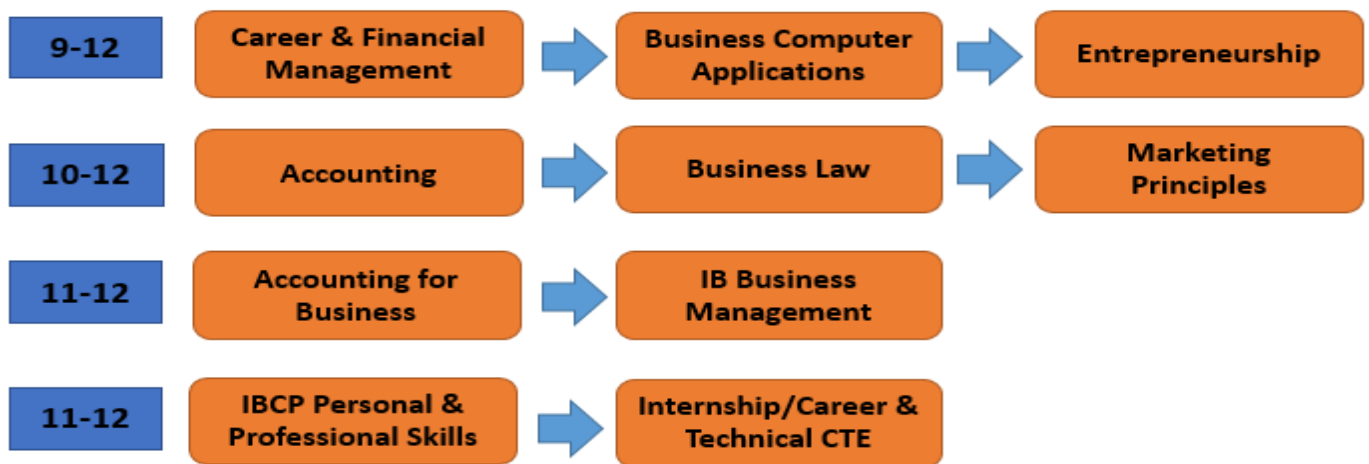
Grade Level: 11-12 Prerequisite: None

This is a 3 credit college class through SUNY Broome's Fast Forward Program. Binghamton high school students receive both high school health credit and college credit simultaneously. The course is an examination of health issue and problems related to individuals and communities. Included is an exploration of wellness/health promotion factors which impact health such as culture, and socioeconomic level, nutrition and fitness, chronic and communicable disease, violence prevention, sexuality, alcohol and drug prevention with an emphasis on health skills.

Business, Finance & Information Technology

GOALS

In keeping with Binghamton City School District's Mission to **educate, empower and challenge** all students to become productive global citizens through innovative approaches to learning, the Business, Finance and Information Technology program prepares students for entry-level employment and/or post-secondary education in business, marketing and computer occupations. The sequences in Business and Information Technology provide a variety of ways for students to meet graduation requirements while developing transferable 21st century skills and specialized competencies which lead to entry into the work force, continued education or management of personal business affairs. This program emphasizes changing trends in business that demand increased decision making, management skills, team based learning, customer service and computer skills, as well as **Work-Based Learning or Co-Op/Internship opportunities**.



Program Outcomes

Knowledge of current technology in the business world, use of personal and business financial skills, effective communication skills, and knowledge of economic, legal and ethical principles as they relate to business.

0500 Accounting

1 Year

1 Credit

Grade Level: 10-12

Prerequisite: None

Department Recommendations: None

This course is designed to develop occupational competencies in accounting. This course is also recommended for students going on to post-secondary accounting training. Course content encompasses the complete accounting cycle, but major emphasis is placed on the accounting process through the trial balance. At the end of the course, students will be able to analyze the effects of business transactions, perform payroll operations and prepare financial statements and other accounting procedures.

0502 Advanced Accounting for Business**1 Year****1 Credit****Grade Level: 11-12****Prerequisite: Accounting****Department Recommendation: None**

A continuation of basic accounting procedures. Topics include journals and ledgers, fundamental financial statements, cash and credit transactions, internal control over cash, bank reconciliation's and adjustments to cash. Merchandise transactions, special journals, estimating and recording credit losses, payroll procedures, and journal entries. This course includes a major capstone project using both manual and the computerized accounting program QuickBooks Pro.

*** pending 3 College credits****0505 Business Law****1 Year****1 Credit****Grade Level: 10-12****Prerequisite: None****Department Recommendation: None**

An overall view and understanding of a student's rights and responsibilities regarding society is investigated. The material discussed ranges from constitutional and criminal law to more common everyday business situations, such as contracts, bailments, agency, and insurance. Students will also develop the ability to reason and solve problems through interpretation of common legal situations. Credit for this course may be used to meet sequence requirements in Business Marketing Education.

0507 Entrepreneurship**1 Year****1 Credit****Grade Level: 10-12****Prerequisite: None****Department Recommendation: None**

Designed for students who are considering a new business venture. Emphasis is placed on exploring and identifying what entrepreneurship is, understanding the challenges of entrepreneurship, recognizing and analyzing business opportunities, start-up issues, marketing, management, capital acquisition, forms of business organization, and other issues of relevance to the new entrepreneur. Students will have the opportunity to take their business ideas to the Greater Binghamton Scholastic Challenge and compete against other local high schools as well as participate in the Junior Achievement Program.

This course includes a major capstone project consisting of a Business Plan and Presentation project.

*** pending 3 College credits**

0508 Career and Financial Management (Required for all CTE students)**.5 Year****.5 Credit****Grade Level: 9 - 12****Prerequisite: None****Department Recommendation: None**

This course is divided into two sections. The first section deals with helping the students to define their interests and how they relate to the world of work, and to expose them to a variety of careers via speakers, visitors, and job shadows. The second section deals with personal resource management including the student's goals and the management of their personal and financial resources. All students will be creating their Career Portfolio's online using Google Docs.

*** pending 3 College credits****0520 Business Computer Applications****.5 Year****.5 Credit****Grade Level: 9-12****Prerequisite: None****Department Recommendation: None**

Students will focus on discussing and learning most commonly used Microsoft Office software utilized in Businesses today. Many hands on activities will be completed using: Word, Power Point, Excel and Publisher.

Much of the class will be taught in a "learn-by-doing" atmosphere. This course will also focus on digital citizenship and will explore digital literacy, how to influence your digital tattoo and the impact of social media. Students will work with a variety of computer technologies that include Google Docs, Schoology, Survey Monkey and many other technology applications.

0519 Marketing Principles**1 Year****1 Credit****Grade Level: 10-12****Prerequisite: Successful completion of at least one other business class.****Department Recommendation: Teacher approval**

For students who are interested in exploring how products are developed, produced, promoted, and distributed. This course introduces students to the world of marketing and its role in business and society. Students will learn about the ever changing field including topics such as: marketing mix, marketing concept, product life cycle, customer behavior, competition, buying, pricing, advertising, and sales. Students will have the opportunity to use their creativity on various marketing projects throughout the year.

0529 IB (SL) Business Management

1 Year

1 Credit

Grade Level: 11-12

Prerequisite: None

Department Recommendation: None

The International Baccalaureate Business Management Course is a critical study of the ways in which individuals and society groups interact in a dynamic business environment. It is an academic discipline that examines how business decisions are made and how these decisions make an impact on internal, external and global environments.

The IB Business Management course is designed to give students an understanding of 5 main areas: **Business Organizations, Human Resources, Accounting, Marketing, and Operations Management.**

Nb. See the Special Information regarding the IB Program and Exams section on page 15.

0051, 0504 IBCP Personal and Professional Skills

1 Year course for IB CP students running from January of junior year to January of senior year

1 Credit

Grade Level: 11

Prerequisite: None

Department Recommendation: All IBCP candidates must take Personal and Professional Skills
This class is for students who are pursuing a sequence in business or engineering. During the course of the year students will explore various issues that have an impact on the world of today, including the effects of globalization, an awareness of other cultures, ethics and the rapid growth of technology. In the process of examining these issues, students will also become aware of their own learning styles and those of their classmates.

***Assessments include short writing assignments, contributing to Socratic seminar discussions, research projects, public speaking, developing PowerPoint and sending emails following proper email etiquette. Students are required to complete a Service Learning Project as well as a Reflective Project. Please refer to page 17.

0503 Internship / Career and Technical (CTE)

.5 Year (.5 Credit = 54 Hours)

1 Year (1 Credit = 108 Hours)

Grade Level: 11-12

Prerequisite: Evidence of participation in any CTE pathway program

Department Recommendation: None

The **CTE Internship** is designed for students with career interests within the finance, business, or culinary industry. Our interns will work with professionals in a field of interest in order to explore the discipline as a potential career. Students can earn graduation credit (based on hours worked) and valuable hands-on experience from completing an internship. Students also participate in the corresponding career prep seminar class that is held once a week and maintain a journal of their experience. A great resume enhancer and conversation piece during job interviews.

***** Students must apply by April. *****

Prerequisite: Evidence of participation in any CTE pathway program and career planning for the occupational focus or completion of high school coursework related to an occupational goal. Students must be 16 years of age or older. They must also have permission from the Work-Based Learning Coordinator.

The Rod Serling School of Fine Arts

Margaret McGarry, Director - 762-8230

The Rod Serling School of Fine Arts at Binghamton High School, was named for famed author Rod Serling, a 1943 graduate of Binghamton Central High School.

A student at the Rod Serling School of Fine Arts can major in any of the following four areas: visual arts, music, theatre, and dance. Within these areas, students can concentrate on individual coursework and gear their study to those interests. For example, in the visual arts, students can concentrate in any of the following: drawing and painting, photography and media, or ceramic and sculpture. In music, there are concentrations in vocal music, instrumental music, and music theory/composition. Theatre majors can specialize in stage drama, or musical theatre. While there are no specific concentrations in dance, the dance program touches upon every genre (ballet, modern, jazz, and ethnic dancing).

Currently, the visual arts and drama department also offers the International Baccalaureate Program as well as several Fast Forward courses through Broome Community College that provide students opportunities to gain college credit. Since the schools inception, it has become a model for fine arts education within New York State and in many districts throughout the nation.

Course Offerings and Performance Groups

There are no audition requirements or prerequisites for the foundation courses in any concentration. There are, however, prerequisites and auditions for some of the more advanced classes and performing groups. With over 30 performing groups in the school of fine arts, there is something for everyone! The Serling Players, the Rod Serling Dance Company, Concert Band, Wind Ensemble, Chorus, Concert Choir, Swing Choir, Davidge Choir, Women's Choir, Orchestra, and Chamber Strings are just some of the opportunities to choose from.

The Rod Serling School of Fine Arts—Theatre

0807 Introduction to Theatre

1 Year

1 Credit

Grade Level: 9 - 12

Prerequisite: None

This course gives an introduction to drama, including its origins and history, its structure, and its varieties, such as comedies, tragedies, TV and radio plays, etc., with a special emphasis on the one-act play. These plays will be read and acted out on a small stage in class. Besides learning the important elements of a play (plot, characterization, and dramatic action) and play production, the student's creativity will be tapped and he or she will learn some acting fundamentals. This will be achieved through theater games and exercises and improvisation. Special attention will be given to using the body and voice more effectively. Students will also work in groups and write their own short plays and act them out in class. Whenever possible, students will see plays and performing artists either on film or live on stage.

0808 Advanced Theatre

1 Year

1 Credit

Grade Level: 9-12

Prerequisite: Introduction to Theatre or Permission of the Instructor

This course is designed for students that already have a background in theatre and enjoy participating in theatre activities. Students will continue to expand their creativity through improvisation and other theatre exercises while also improving their on-stage and backstage presence. Students will continue to learn how to build a character, memorize lines, design a set, stage a production, design costumes, make-up and hair – whatever is needed for a real performance. Students will do all this while going through the history of Western theatre from Greek theatre to Modern American Drama and the American Musical. This course is recommended for anyone that wishes to continue their theatre education towards a Rod Serling diploma. It is strongly recommended for those who wish to try out for roles in plays and musicals, not only at Binghamton High School but also in the community. Whenever possible, students will see and participate in live performances. This course is good preparation for those who wish to study theatre in college.

0824 Theatre and Musical Production

1 Year

1 Credit

Grade Level: 10-12

Prerequisite: Introduction to Theatre or Permission of the Instructor

This course is designed for those students who enjoy working on theatrical productions. It is strongly recommended for those who wish to try out or work backstage for plays and musicals, not only at Binghamton High School but also in the community. Students will continue to expand their creativity through improvisation and other acting exercises focusing on voice and stage presence. Students will also continue to work on technical theatre aspects of the production. Students will learn how to build a character, memorize lines, design a set, stage and block a production, costumes, make-up and hair, lighting, sounds, props – whatever is needed for a real performance. Students will be performing in or working backstage on three major productions (the fall play, spring musical, and dessert cabaret) as well as productions in the classroom. Whenever possible, students will see and participate in live performances. This course is good preparation for those who wish to study theatre in college. It is strongly recommended for those who wish to try out or work backstage for plays and musicals, not only at Binghamton High School but also in the community.



Theatre is about transformation. It is the application, through play, of energy and imagination to frame, reflect, expose, critique and speculate. The Diploma Programme theatre course is designed to encourage students to examine theatre in its diversity of forms from around the world. This may be achieved through a critical study of the theory, history and culture of theatre, and will find expression through workshopping, devised work or scripted performance. Students will come to understand that the act of imagining, creating, presenting and critically reflecting on theatre in its past and present contexts embodies the individual and social need to investigate and find explanations for the world around us.

The theatre course emphasizes the importance of working individually and as a member of an ensemble. Students are encouraged to develop the organizational and technical skills needed to express themselves creatively in theatre. A further challenge for students following this course is for them to become aware of their own perspectives and biases and to learn to understand and value those of others. This requires a willingness to understand alternative views, to respect and appreciate cultural diversity, and to see the varied role that theatre plays in reflecting these. As a result, the theatre course can become a way for students to celebrate the international and intercultural dynamic that inspires and sustains some forms of contemporary theatre, while appreciating the specifically local origins that have always given rise to performance, and which, in many parts of the world, still do.

At the core of the theatre course lies a concern with clarity of understanding, critical thinking, reflective analysis, effective involvement and imaginative synthesis—all of which should be achieved through practical engagement in theatre.

The Rod Serling School of Fine Arts— Visual Arts

GOALS

The primary goal of the visual arts department is to provide our students with a program of instruction that allows each the opportunity to acquire the knowledge and skills necessary to express ideas by way of the visual arts. By stressing the basic fundamentals of each discipline offered and by supplementing these with advanced courses whenever possible we hope to assure our students every chance to realize their own potential as unique individuals with significant ideas to express.

If a student is considering taking an IB Art Course in the 11th and/or 12th Grades, one of the Arts Foundation Courses should be taken in Grades 9 or 10.

Arts Foundation Courses:

0700 Studio In Art

0705 Studio In Media Arts

0709 Studio In Creative Crafts

**Pending sufficient enrollment of students*

0700 Studio In Art

1 Year

1 Credit

Grade Level: 9-12

Prerequisite: None

Studio in Art is a foundation course in drawing, painting and design. The fundamentals of drawing, composition, and design are taught using a variety of media such as pencil, charcoal, pen and ink, wash, and color. Work with mixed media and 3-dimensional design is also included.

0701 Drawing and Painting I

1 Year

1 Credit

Grade Levels: 10-12

Prerequisite: Studio in Art

Drawing and Painting I is an advanced art course designed for those students who have successfully completed a 1 Year of Studio in Art. The course content deals with advanced concepts in drawing, painting, and design. Students will use a variety of media to draw from life and imagination. More emphasis will be placed on color, color theory, and color application.

0723 Drawing and Painting II

1 Year

1 Credit

Grade Levels: 10-12

Prerequisite: Studio in Art, Drawing and Painting I

Drawing and Painting II is an advanced art course designed for those students who have successfully completed 1 Year of Studio in Art and Drawing and Painting. The course content deals with advanced concepts in drawing, painting, and design. Students will use a variety of media to draw from life and imagination. More emphasis will be placed on color, color theory, and color application.

0705 Studio In Media Arts**1 Year****1 Credit****Grade Level: 9-12 Prerequisite: None**

Media Arts is a foundation level class that focuses on the fundamentals of Media production. Media Arts is designed for the student who is interested in using technology as an artistic medium. Potential processes include, but are not limited to: mixed media and digital photography, graphic design, video production and animation. This course will also cover the topics of media awareness and careers in media arts. This course is a required prerequisite for Photography and Media Arts II.

0725 Graphic Arts (Media II)**1 Year****1 Credit****Grade Levels: 10-12****Prerequisite: Studio In Media Arts**

This is a second year course that will further the exploration of Media Arts. This computer based course will cover the key concepts of creating digital images using computer programs such as Photoshop, InDesign, Illustrator, and Dreamweaver. Projects include, but are not limited to, typography studies, logo design, product design, advertising design, poster design and web design. Media Arts, or a comprehensive understanding for computer programs, is a prerequisite for this course.

0706 Photography**1 Year****1 Credit****Grade Level: 10-12****Prerequisite: Studio in Media Arts**

This is a second year class that is designed to be an in depth exploration into the world of Photography. Students will investigate the history of photography through research and hands on experience. Techniques learned will include, but not be limited to: the darkroom, alternative processes and digital editing. A variety of cameras and formats will be used. Students are required to successfully complete and receive a passing cumulative grade in Media Arts prior to registration in Photography.

0709 Studio In Creative Crafts**.5 Year****1 Credit****Grade Level: 9-12 Prerequisite: None**

Creative Crafts is a foundation course in crafts and mixed media. Instruction will be provided in a variety of materials and projects including printmaking, weaving, jewelry making, batik, clay, and more.

0707 Advanced Photography (ATC)

1 Year

1 Credit

Grade Level: 11-12

Prerequisite: Photography

This course is designed for the student with a serious interest in pursuing photography. Students will experiment with various forms and techniques in creating images as both Fine Art, and also as a form of communication. The goal of this class is to further develop student's independent artistic voice. A level of professionalism is expected and students will create 'working' portfolios for future placement. Learning will be enhanced through research, and the use of critique. Students may register for a second year of Advanced Photography after completing the first and with the permission of the instructor in place of an independent study.

Curriculum and grading is aligned with SUNY Broome Communications expectations.

Fast Forward College Credit offered through SUNY Broome-COM 112, Beginning Photography (Fall/ 3 credits) and COM 211, Digital Photographic Imaging (Spring/ 3 credits)

0703 AP Art

1 Year

1 Credit

Grade Level: 11-12

Prerequisite: Studio in Art, Drawing and Painting

Advanced Placement Art is a 1 year course designed primarily for the college bound art student. Classwork and instruction involves a variety of freshmen college level drawing and painting assignments to be included in a final portfolio.

****The running of AP Art as a course is contingent on minimum enrollment to be determined annually. If enrollment is low, the district will make all efforts to run the course the following year.***

0712 AP Art History

1 Year

1 Credit

Grade Level: 10-12 or permission from Instructor

Prerequisite: None

AP Art History is a rigorous course, which covers art from caves to current post modern era. Its concept is based upon how and why the history of the era influences the artwork. This course is an excellent and exciting complement to AP European History. An art background is not required; this course is open to all students interested in learning about Art or History.

0717 Studio in Jewelry Making

1 Year

1 Credit

Grade Level: 10-12

Prerequisite: Any foundation of Studio/Crafts/Media.

This course is an introduction to the fundamentals of jewelry making. Personal adornment is explored as an art medium that allows for creative expression of the individual. Various media are used to create wearable art; metal, wire, beads and clay. The application of particular principles of design and creative thinking are used in creative problem solving.

0715 Studio in 3-D Art I

1 Year

1 Credit

Grade Level: 9-12

Prerequisite: Studio, Media, Crafts or permission of the instructor

This course is designed to introduce students to production of three-dimensional works of art, specifically ceramic and sculpture processes. Ceramics instruction will focus on the basics of hand-building techniques (slab, coil, and pinch methods) and throwing on the pottery wheel. Sculpture instruction will include any of the following: modeling with clay, carving, constructing and assembling various media such as wood, clay, paper, stone, metal, wire and found objects.

0721 Studio in 3-D Art II (AP Studio Art 3-D)

1 Year

1 Credit

Grade Level: 10-12

Prerequisite: 3-D Art I or permission from Instructor

This course is an advanced version of 3-D Art I, directed to further developing higher-level skills in ceramics and sculpture. There will also be more emphasis on the conceptual and aesthetic thinking processes that go into the production of three-dimensional works of art.

0714 IB Visual Arts SL

1 or 2 Years

1 or 2 Credits

Grade Level: 11-12

Prerequisite: Recommended high school arts foundation course. (Studio Art, Media Arts, Creative Crafts.)

This is a one or two year college preparatory course for the student who is interested in the visual arts or research, writing and creating art. Within one or two years, the student will explore various media including drawing, painting, mixed-media, printmaking, photography, ceramics, and more.

Senior year, students will work with a focus/theme and present a portfolio of work for exhibition.

All students enrolled in an IB course of study are required to take the final exam in May as part of their final assessment. Students receive 1.15 credit weighting for an IB course of study.

Students must sign up for their IB examination by November. Students who do not sign up for an IB examination will remain in the class. However, the IB course they are enrolled in will be recorded on their transcript and report card as an "honors" level course. Students will receive only 1.1 credit weighting. In addition, students who sign up for the exam and do not "show up" to take it will also receive only 1.1 credit weighting.

0713 IB (HL) Visual Arts

2 Years

2 Credits

Grade Level: 11-12

Prerequisite: Recommended high school arts foundation course. (Studio Art, Media Arts, Creative Crafts.)

This is a two year college preparatory course for the student who is interested in the visual arts or research, writing and creating art. In the first year, the student will explore various media including drawing, painting, mixed-media, printmaking, photography, ceramics, and more.



Information Relating to HL and SL:

Learning Outcomes

Throughout the course, teachers will help students to:

- develop the skills and techniques of investigation - both visual and written relate art to its cultural and
- historical contexts
- explore art concepts
- explore art elements
- develop and use the processes of art criticism and analysis
- develop confidence and expertise in the use of various media
- extend their knowledge of design
- share their work with an audience through displays and exhibitions or presentations
- make connections between ideas and practice - both their own and others'
- extend individual investigation to inform practical work

The Visual Art course has three core elements:

- introduction to art concepts, criticism and analysis
- acquisition of studio, technical and media skills
- relation of art to sociocultural and historical contents

The difference between the Higher Level and Standard Level courses will be in the time that is spent. Higher Level will require 240 hours of instruction and Standard Level will require 150 hours.

All art takes time to create. Summer assignments and some evenings and weekends may be required to complete studio work as well as work in the IWB for a quality portfolio for external assessment by April.

Students enrolled in the IB Course of Study must take the exam in May.

The Rod Serling School of Fine Arts—Music

GOALS

To help pupils sense aesthetic values in music and develop a lasting appreciation and enjoyment of good music. To have each pupil achieve success as an individual to learn the necessary skills for solo and group performance.

CREDIT CRITERIA

The following performing groups are co-curricular and credit bearing with a minimum of 4 or 5 - 40 minute rehearsals per week. According to the New York State Education Department Handbook they will receive .5 credit per term.

Performing group students are required to have a sufficient commitment to the group to attend rehearsals, lessons, and performances. The Music Department is quite flexible in rescheduling lessons, giving make-up time, and providing alternate rehearsal time for students who because of academic, economic, or other reasons cannot meet teachers during normal scheduled hours. We ask that this commitment be retained by the students throughout the year. Failure to do so generally results in the student being asked to discontinue participation in the group.

0800 Symphonic Winds

1 Year

.5 Credit

Grade Level: 9-12

Prerequisite: Instrumental lessons and recent previous experience.

Symphonic Winds is open to all students who play instruments and meets only on even days. Each student is required to take lessons from the director on a pull-out schedule from classes. Symphonic Winds has several adjunct groups and small ensembles (e.g. flute choir, woodwind trio, brass ensemble, etc.). Students participate in three to four performances each school year. Students enrolling in Symphonic Winds also have the opportunity to apply for Honors Credit for their work in this ensemble.

0801 Jazz Ensemble

1 Year

.5 Credit

Grade Level: 9-12

Prerequisite: By audition. Students must play in Symphonic Winds or Wind Ensemble.

The study of Jazz music: Swing, Big Band, Latin and Rock/Funk music study and performance in a Big Band setting. Improvisation skills are taught and applied. Meets during the first half of lunch on odd days in A201. Acceptance is by audition. Educational performance travel trips usually occur every other year. Students participate in three to four performances each school year. Students enrolling in Jazz Ensemble also have the opportunity to apply for Honors Credit for their work in this ensemble.

0802 Stage Band

1 Year

.5 Credit

Grade Level: 9-12

Prerequisite: Students must play in Symphonic Winds.

The study of jazz and rock music in an ensemble setting. Class includes transcribing, composition and soloing. Ensemble music and performances. Students participate in two performances each school year.

0803 String Orchestra

1 Year

1 Credit

Grade Level: 9-12

Prerequisite: Instrumental Lessons and previous experience playing a string instrument required.

Orchestra provides the opportunity for string players to advance their playing abilities through ensemble experience, individual or small- group lessons, and allows the opportunity for students to pursue additional performing experiences (Solo and Ensemble Festivals) outside the classroom setting. Students have the opportunity to study a variety of musical styles ranging from classical to popular depending on the ensemble and solo/small-group literature programmed. Besides daily rehearsals, students are required to attend one lesson per week (out of class on rotating schedule), complete written assignments/playing exams and perform in 3 (graded) evening concerts per year. Students enrolling in Orchestra also have the opportunity to apply for Honors Credit for their work in this ensemble.

0804 Mixed Chorus

1 Year

.5 Credit

Grade Level: 9-12

Prerequisite: None

Mixed Chorus is open to any students who want to sing. This ensemble performs literature from a wide range of musical genres, including sacred, pop and spiritual. Participation in two evening performances is a requirement. Enrichment opportunities such as small ensembles educational travel, and a variety of other experiences are incorporated into the course. A biweekly small group lesson is required. Students enrolling in Mixed Chorus also have the opportunity to apply for Honors Credit for their work in this ensemble.

0805 The Crescendos

1 Year

1 Credit

Grade Level: 9-12

Prerequisite: None

The smaller choir is open to any student wishing to sing! This ensemble performs literature drawn from a wide variety of musical genres including, but not limited to, pop, Broadway and jazz. Participation in two evening performances is a requirement. Enrichment opportunities such as small ensembles, educational travel and a variety of other experiences are incorporated into the course. A biweekly small group lesson is required. Students enrolling in The Crescendos also have the opportunity to apply for Honors Credit for their work in this ensemble.

0817 Rod Serling School Concert Choir

1 Year

.5 Credit

Grade Level: 9-12

Prerequisite: By audition. Members must also sing in either mixed chorus or The Crescendos

Students are selected for this ensemble based upon demonstration of skills and sight reading. The music performed is generally NYSSMA Level VI and of a more classical or sacred nature. Concert Choir's performance schedule is more rigorous than that of the other vocal ensembles, requiring one to four concerts per semester. The grade for this class is weighted due to the difficulty of the material studied by this ensemble.

0820 Wind Ensemble**1 Year****.5 Credit Weighted Grade****Grade Level: 9-12****Prerequisite: By audition. Members must play in Symphonic Winds.**

The BHS Wind Ensemble is a small, elite version of Symphonic Winds. It contains brass, woodwinds, and percussion but is by audition and therefore will perform more advanced works. All members in Wind Ensemble will be required to play in Symphonic Winds, unless a conflict occurs, in which case a decision will be made by the Director. Every other year, the Wind Ensemble will travel on an educational performance trip throughout the United States and abroad. Wind Ensemble grades are weighted. Each student is required to take lessons from the district on a pull-out schedule from classes. Students participate in three to four performances each school year.

0827 Steel Drum Band**1 Year****.5 Credit****Grade Level: 9-12****Prerequisite: By audition.**

The study of percussion ensemble music and performance; includes steel drums, percussion and drums, and keyboard mallet percussion. Numerous performances throughout the year and travel performance trips as well. Students are required to have a strong work and practice ethic with minimal schedule conflicts during rehearsal times. Rehearsals are Monday from 2:55 to 3:30 and Wednesday from 2:55 to 4:00 in A201. Each student is required to take lessons from the music teacher on a pull-out schedule from class.

0828 Guitar**1 Year****1 Credit****Grade Level: 9-12****Prerequisite: None**

This is an introductory course into the world of guitar playing. All levels welcome. Topics covered are instrument care/maintenance, basic first position chords to Barre Chords, basic music theory, note reading, tablature, strumming, finger picking, guitar anatomy, guitar history, guitar performance and internet resources relating to guitar playing. Guitar history will include style study of various rock and roll genres and famous guitarists who influenced these genres. Student performance is based on achievement and improvement throughout the course. Required work: written tests and quizzes, written assignments, scales and chord drills, in class performance and a final guitar project.

0829 Piano**1 Year****1 Credit****Grade Level: 9-12****Prerequisite: None**

This is an introductory course into the world of keyboard/piano playing. Beginning levels welcome. Topics covered are scales, chords, note reading, harmonic structure, piano/keyboard history, practice techniques and keyboard performance. All styles will be covered: from Baroque and Classical, to modern and classic popular music; Students will play both solos (independent work) and ensembles (as a class).

Student performance is assessed based on effort, practice skills, improvement, and achievement as shown by weekly or bi-weekly playing tests, and quarterly performances. Required work: written theory and note-reading assignments, quizzes, practice journal, weekly or bi-weekly performance assessments, quarterly in-class performance projects, and a final keyboard/piano performance project.

0831 Piano II
1 Year
1 Credit
Grade Level: 10-12
Prerequisite: Piano I

This course is for students who have successfully completed Piano 1 and would like to continue their studies in piano. Advanced techniques will be introduced as students become more sensitive to tone, pedaling, phrasing, articulation and dynamics. Various types of piano music from throughout history will be explored, from Bach to present day. Technical studies will include Hanon exercises, two octave scales, arpeggios, and cadences with inversions. Piano 2 students will review and strengthen skills in music reading, music theory, effective practice techniques, and ultimately gain confidence in piano performance.

0832 World Drumming
1/2 Year
1/2 Credit
Grade Level: 9-12
Prerequisite: None

The study of drumming from portions of Africa, South America and the Caribbean. Students will play on authentic instruments from each of these regions, learn and perform rhythms and understand the cultural differences and similarities between the aforementioned. Students will record a class portfolio CD of all the music they learn.

0838 Music Writing and Production
1 Year
1 Credit
Grade Level: 9-12
Prerequisite: None

Music writing and production class focuses on the creation of original music. Students are led through a variety of activities including singing and playing instruments, composing, and writing lyrics, while also developing an understanding of pop music/recording history and exploring careers in the music field. This class takes place in a computer lab in which students interact with digital audio workstation software in conjunction with MIDI (piano) keyboards, microphones, and other gear in creating their own unique sound.

0815 Music Theory/Fundamentals of Music
1 Year
1 Credit
Grade Level: 11-12

This course is for those students having little or no prior knowledge of music theory but desiring to learn and explore the basic tools of music: clefs, note names, scales, rhythm, modes, intervals, triads, key signatures, form and familiarity with the piano keyboard. Students will learn the fundamental elements needed to write and perform music and develop an understanding of how composers create meaningful works of art.

*The BCSD will apply for this course to become a FF course through Broome Community College in April 2019. If approved, students will receive college credit for this course commencing in 2019-20 school year.

The Rod Serling School of Fine Arts—Dance

GOALS

The goals of the Dance department is to introduce and educate the students about the physical techniques, choreographic approaches, historical and cultural contexts, and aesthetics of dance. The students will have the opportunity to explore their own creativity and dance abilities as well as techniques and styles that are new to them. The courses are designed to develop physical, intellectual and emotional awareness related to dance as an expressive art. It is our hope that the students will appreciate that dance is much more than a mere physical activity, and that through dance, as through other disciplines, individuals can enrich the quality of their lives.

Note: **Depending on enrollment and scheduling, double-period and/or mixed level classes may be offered.**

0809 Dance I

1 Year

1 Credit

Grade Level: 9-12

Prerequisite: None

This is an introductory level dance course in which you will be exploring and expanding your knowledge of dance and its history, techniques, aesthetics and nature. This course is designed to develop physical, intellectual and emotional awareness related to dance as an expressive art. When you complete this course, not only will your knowledge, understanding, appreciation and embodiment of dance improve, but also your ability to think creatively, divergently and critically. A variety of differing dance forms such as Jazz, Ballet, Lyrical, Contemporary, African, Step and Hip Hop will be taught. Students will participate in one cumulative performance at the end of the year.

0810 Dance II

1 Year

1 Credit

Grade Level: 9-12

Prerequisite: Dance Studio I or instructor's permission

This is a beginner level dance course in which you will be exploring and expanding your knowledge of dance and its history, techniques, aesthetics and nature. This course is designed to develop physical, intellectual and emotional awareness related to dance as an expressive art. When you complete this course, not only will your knowledge, understanding, appreciation and embodiment of dance improve, but also your ability to think creatively, divergently and critically. A variety of differing dance forms such as Jazz, Ballet, Lyrical, Contemporary, African, Step and Hip Hop will be taught. Students will participate in one cumulative performance at the end of the year.

0811 Dance III

1 Year

1 Credit

Grade Level: 9-12

Prerequisite: Dance Studio II or instructor's permission

This is an intermediate level dance course in which you will be exploring and expanding your knowledge of dance and its history, techniques, aesthetics and nature. This course is designed to develop physical, intellectual and emotional awareness related to dance as an expressive art. When you complete this course, not only will your knowledge, understanding, appreciation and embodiment of dance improve, but also your ability to think creatively, divergently and critically.

A variety of differing dance forms such as Jazz, Ballet, Lyrical, Contemporary, African, Step and Hip

Hop will be taught. Students will participate in one

cumulative performance at the end of the year. This course also includes semi-private lessons in which the student receives individualized instruction to further help them advance and meet their individual dance needs and goals.

0727 Dance IV

1 Year

1 Credit

Grade Level: 9-12

Prerequisite: Dance Studio III or instructor's permission

This is an advanced level dance course in which you will be exploring and expanding your knowledge of dance and its history, techniques, aesthetics and nature. This course is designed to develop physical, intellectual and emotional awareness related to dance as an expressive art. When you complete this course, not only will your knowledge, understanding, appreciation and embodiment of dance improve, but also your ability to think creatively, divergently and critically. A variety of differing dance forms such as Jazz, Ballet, Lyrical, Contemporary, African, Step and Hip Hop will be taught. Students will participate in one cumulative performance at the end of the year. This course also includes semi-private lessons in which the student receives individualized instruction to further help them advance and meet their individual dance needs and goals.

*Student may be placed in an advanced level dance course depending on experience and teacher discretion.

Project Lead The Way Pre-Engineering & Technology

Binghamton City School District's Mission is to **educate, empower and challenge** all students to become productive, global citizens through innovative approaches to learning. The BHS Pre-Engineering and Technology department offers students a variety of courses which, when combined with traditional mathematics and science courses in high school, introduces students to the scope, rigor and discipline of engineering prior to entering college. **The Project Lead the Way (PLTW)** program is a four year sequence curriculum that is taught at BHS. This course is a hands-on, project based approach to learning that better prepares students for the rigors of college. Students not intending to pursue further formal education will also benefit from the knowledge, logical thought processes, problem solving skills and teamwork skills that result from taking some or all of the courses provided in the curriculum. This program allows students to apply their math and science skills to real world problems. Students will have an opportunity to explore the broad field of engineering to help them make career decisions. It is better to find out in high school if this is an area of interest, rather than in college. The program is presented in a project oriented manner that encourages problem solving skills in a team centered approach similar to what students will be doing when they go to work in industry.

Typical PLTW Sequence



College Credit

BHS has been reviewed and certified by Rochester Institute of Technology (RIT) to offer credit for DDP, CIMS, DE, and POE. PLTW creates the online college credit final exams given in all of these courses. If a student earns an 85% or higher for the course and earns a passing grade on the PLTW college credit exam, then that student may apply for RIT transcribed college credit. The tuition charge for each course is \$225. Tuition is not required until all grades are in, and the student has decided to apply for credit. Upon high school graduation, a student may apply the credit at RIT, or they may request an official transcript from RIT to be sent to the college of their choice. Credits can be used as elective credit in a wide variety of majors.

0600 Design and Drawing for Production (DDP)

1 Year

1 Credit

Grade Level: 9-12

Prerequisite: None

Recommendations: None

Design and Drawing for Production (DDP) is a course that teaches problem-solving skills using a design and development process for products. Models of product solutions are created, analyzed, and communicated using solid modeling computer design software. DDP follows a project-based curriculum outlined by the nationwide Project Lead the Way program. Students will create hand drawn sketches, as well as computer generated models of parts, assemblies and drawings. The software being applied in the classroom is the latest version of Autodesk Inventor. Some of the top designs will be manufactured using our 3D printer. Students will also use Microsoft PowerPoint or Goggle Slides to present their designs to the class. This course meets the graduation requirement for one unit of art/music.

0601 Digital Electronics (DE)

1 Year

1 Credit

Grade Level: 10-12

Prerequisite: Passed Algebra Regents

Recommendations: Passed or Current in Geometry

DE is a course of study in applied digital logic. Students will be introduced to digital circuits found in video games, watches, calculators, digital cameras, and thousands of other devices. Students will study the application of digital logic and how digital devices are used to control automated equipment. The use of digital circuitry is present in virtually all aspects of our lives and its use is increasing rapidly. Students construct circuits using state-of-the-art circuit simulation software and electronic lab equipment. This course is similar to a first semester college course and is an important course of study for a student exploring a career in engineering or engineering technology.

As outlined in Commissioner's Regulations 100.5(a)(7)(iv), for students who have successfully passed the required Math A Regents examination and **upon local educational agency approval**, this specialized course may be used to fulfill one of the three units of mathematics required for the Regents diploma.

0602 Computer Integrated Manufacturing Systems (CIMS)

1 Year

1 Credit

Grade Level: 10-12

Prerequisite: Design and Drawing for Production (DDP)

Recommendation: Successful completion of Algebra 1

CIMS is a course that applies principles of rapid prototyping, robotics and automation. This course builds upon the computer solid modeling skills developed in DDP. Students will use computer controlled rapid prototyping and CNC equipment to solve problems by constructing actual models of their three-dimensional designs. Students will also be introduced to the fundamentals of robotics and how this equipment is used in an automated manufacturing environment. Students will evaluate their design solutions using various techniques of analysis, and make appropriate modifications before producing their prototypes.

0603 Principles of Engineering (POE)

1 Year

1 Credit

Grade Level: 11-12

Prerequisite: Design and Drawing for Production (DDP)

Recommendation: Passed Algebra 1 Regents

POE is designed to help students understand the wide variety of engineering and engineering technology career possibilities. Students will work on the problem-solving skills that are applied at the college level and in any engineering profession. POE follows the project-based curriculum outlined by the nationwide Project Lead the Way program. Students will explore and simulate different engineering systems and learn how to apply math, physics, technology, and computers through a hands-on learning approach.

As outlined in Commissioner's Regulations 100.5(a)(7)(iv), for students who have successfully passed the required Math A Regents examination and **upon local educational agency approval**, this specialized course may be used to fulfill one of the three units of mathematics required for the Regents diploma.

0604 Engineering Design and Development (EDD)

1 Year

1 Credit

Grade Level: 11-12

Prerequisite: Design and Drawing for Production (DDP), and/or concurrent enrollment in Principles of Engineering (POE)

Recommendations: Three PLTW courses

Engineering Design and Development (EDD) is a PLTW engineering capstone course where students research, design and construct a solution to an open-ended engineering problem, while following the procedure to legally patent a product. Students apply principles developed in the four preceding courses to invent a new product. Students will keep a journal documenting the day by day progress of their invention. They must present progress reports, submit a final written report, and defend their solutions to a panel of reviewers. Notepad also included in this course is a unit dedicated to architectural history and design, where students use Autodesk Revit Architecture software to design their own structure and present a walkthrough video of that creation.

Family & Consumer Sciences (FACS)

GOALS

The goal of this program is to help prepare you to enter into our ever-changing world ready for life and work. It is also made up of exciting courses that can be taken as part of the sequence or individually.

0650 Culinary Arts I–Food Preparation and Nutrition

1 Year

1 Credit

Grade Level: 9-12

Prerequisite: None

This course gives students a comprehensive understanding of basic food cookery, industry terminology, product identification, and the use and care of food service equipment. Lecture, demonstration, and laboratory formats are utilized. Discussions include food safety and sanitation, history of food preparation, nutrition, current food issues and careers.

0651 Culinary Arts II–Global and Gourmet Foods

1 Year

1 Credit

Grade Level: 10-12

Prerequisite: Culinary Arts I

This course is designed to provide students with an in depth look into the culinary industry. The course includes comprehensive descriptions of terminology and cooking principals coupled with culinary arts history and product identification. Discussion covers proper storage/sanitation, nutrition, profitability, and food science as well as choosing methods for various food products. Students learn advanced preparation and cooking skills as well as sanitation/safety measures. Emphasis will be placed on regional cuisine of the United States, international cuisine, the future of the food supply and careers, as well as professionalism and proper kitchen procedures. Students will complete the ServSafe Manager course and be eligible to take the national exam.

0653 Culinary Arts III–Food Science

1 Year

1 Credit

Grade Level: 11-12

Prerequisite: Culinary Arts I and II

The fundamental biological, chemical and physical scientific principals associated with the study of foods; topics include food composition and nutrition, food additives and regulations, food safety and toxicology, food processing, food engineering, food biotechnology, product development and sensory evaluation.

0656 Child Development**1 Year****1 Credit****Grade Level: 10-12****Prerequisite: None**

Child Development serves as an excellent first glance into the development and care of a child. Students will learn how parents and childcare providers can meet a child's needs to promote healthy growth and development. This class focuses on how a child develops from conception to 4 years of age. Students will come out of this course with a better knowledge of the effort and time it takes to raise a child and best practices for raising healthy, thriving children. To provide practical application of theory and academic learning, students observe and participate in our own Pre-Kindergarten laboratory.

0658 Early Childhood Education**1 Year****1 Credit****Grade Level: 10-12****Prerequisite: Child Development**

This course is a continuation of Child Development for students who want to further their knowledge and understanding of children. Students will be given a variety of challenging real world projects and assignments that will help in understanding how a child develops. Students who enroll in this course will observe and participate in our own Pre-Kindergarten laboratory.

Special Education Department

PHILOSOPHY OF THE DEPARTMENT

BHS accepts the responsibility to challenge all students to reach their fullest potential and assure that they acquire knowledge, skills and attitudes necessary to become responsible and productive citizens. We support the concept of students learning alongside their peers - even when their goals may be different. Every effort is made to meet these individual needs and goals in the context of the regular classroom through a rich and accommodating curriculum to the maximum extent possible.

EDUCATION FOR STUDENTS WITH SPECIAL NEEDS

Programs for students with disabilities are available at Binghamton High School. Students with disabilities have their programs reviewed at least annually by the Subcommittee on Special Education. The Committee on Special Education (CSE) then determines what services or programs are necessary so that Individualized Educational Plans (IEP) can be prepared for each student. Students are placed in programs and receive Special Education Services by the CSE. Self-contained special education programs are taught by Special Education Certified Teachers. All courses are 1 Year unless otherwise noted.

RELATED SERVICES

• Counseling • Occupational Therapy • Physical Therapy • Speech Therapy

SERVICES

Resource Room

Prerequisite: CSE Determination

Resource Room is a pull out academic support period one time a day. Students work on individual needs based on the student's IEP.

Consultant Teacher Services

Prerequisite: CSE Determination

Special education services provided directly to a student in the general education classroom. This service is typically 2 or 3 times a week within a specific content.

12:1 Integrated Co Teaching Prerequisite: CSE Determination

Special education services are provided to a group of 12 or less students with disabilities in the general education classroom in a co teaching model where there are 2 teachers (1 general education and 1 special education) daily. The model of planning, delivery, and assessment is shared. This is an inclusive service based on behavior, academic abilities, and CSE recommendations.

12:1+2 PALS (Preparation for Adult Living Skills) Prerequisite: CSE Determination

This is a self-contained non-Regents level program. Students are working on functional living skills, provided community work opportunities, along with working on individual goals and objectives as determined by the CSE and their individual IEP. Mainstream opportunities are available for all students based on behavior, academic abilities and CSE recommendations. Outcome for this program is a Skills and Achievement Commencement Credential. All students are alternatively accessed via data folio.

15:1 Regents Prep Prerequisite: CSE Determination

This is a self-contained program. Regents level curriculum provided at a slower pace with built in repetition within a smaller classroom environment. Inclusive opportunities are available based on behavior, academic abilities and CSE recommendations.

15:1 Social Skills ASD**1 Year****1 Credit****Prerequisite: CSE Determination**

This class serves to build communication, coping and life skills for students to prepare for college and career readiness. This class will provide students with a safe, supportive and secure environment where their social and emotional needs are met.

15:1 Social Skills AA**1 Year****1 Credit****Prerequisite: CSE Determination**

This class serves to build intra-personal social skills, managing one's self, collaborating effectively, focusing and prioritizing, emotional awareness and how to build rapport with teachers.

15:1 Career Exploration/Investigation and Career Clustering**Grade 9****1 Year****1 Credit****Prerequisite: CSE Determination**

This course will review CDOS requirements, including but not limited to career planning and preparation, student service learning/work-based learning, college and career readiness, CTE planning, building an employability profile and development/tracking of a career plan.

15:1 Career Exploration/Investigation and Career Clustering**Grade 10****1 Year****1 Credit****Prerequisite: CSE Determination**

This course will review CDOS requirements including but not limited to career planning and preparation, student service learning/work-based learning, college and career readiness, CTE planning, building an employability profile and development/tracking of a career plan.

NYS Career Development and Occupational Studies (CDOS) Commencement Credential Requirements

The student must have developed a Career Plan that follows them through all four years of high school and includes documentation of the student's self-identified career interests, career-related strengths and needs, career goals, career & technical coursework and work-based learning.

The student must have demonstrated achievement of the commencement level CDOS learning standards.

The student must have successfully completed at least 216 hours of CTE coursework and/or work-based learning experiences (at least 54 hours must be in a work-based learning experience).

The student must have at least one completed employability profile that documents the student's standards and attainment of technical knowledge and work-related skills, work experiences, performance on industry-based assessments and other work-related and academic achievements.

BOCES

The following is a list of course descriptions identifying the career-technical courses available to all secondary students at Binghamton High School. The courses are offered at the Broome-Tioga BOCES, located on Upper Glenwood Road, Binghamton, New York. Any student electing to pursue a BOCES course selection will attend Binghamton High School for one-half of the school day, and travel by bus, to and from BOCES for the remaining one-half of the school day.

All students attending BOCES are evaluated with the performance based criterion established for each individual class. The student performance reporting system used by BOCES will be explained to all students upon entering into the BOCES program. All students attending BOCES remain within the attendance procedures and guidelines of Binghamton High School.

For each Introductory, Intermediate, and Advanced Placement course, students receive three (3) credits per year.

For each New Visions Academy course, students receive four (4) credits per year.

For the Youth Apprenticeship Program, students receive three (3) credits for the one-year program and five (5) credits for the two-year program.

WHAT ABOUT EQUIPMENT AND SUPPLIES?

There are some areas that require mandatory equipment not provided by BOCES. Work shoes must be purchased and worn by all students in the following clusters: Building Trades, Agriculture, Automotive, and Manufacturing and Repair.

Uniforms must be purchased and worn in the following courses: Culinary Arts, Cosmetology and Nurse Assistant. Any other equipment and/or supply needs will be explained to you when you enter a BOCES course.

Additional student fees may be required for state exams and/or supplies:
\$ = up to \$50 \$\$ = \$50 to \$100 \$\$\$ = \$100 to \$200

QUESTIONS TO ASK YOURSELF:

1. Why do I want to take an Occupation Course?
2. What course seems really interesting to me?
3. Do I have the abilities necessary to be successful in the course I have chosen?
4. Would I enjoy a full time job using the skills I will learn at BOCES?
5. Are jobs available that are related to the course I have chosen?
6. If I am planning to attend college, will the course I have chosen help me?

STEPS TO TAKE IF YOU WANT TO ATTEND BOCES:

1. Talk to your high school counselor early in the year.
2. Discuss your plans with your parents.
3. Visit the BOCES courses that interest you.
4. Talk to the BOCES counselors.
5. Attend a tour or open house with your parents.
6. Sign up for the course of your choice with your guidance office when he/she meets with you to schedule your courses for the following school year.

For further information regarding BOCES Occupational courses, see your home school counselor or call BOCES. You may call BOCES at 763-3343, Monday through Friday, between 8:30 a.m. and 4 p.m.

BOCES Introductory Courses

These two-year courses are designed to expose students to these career fields and prepare them for entry-level jobs.

1135/1136 Animal Care Careers

Animal Care Careers serves as an introduction to the animal care industry. Students learn animal care safety, instruction in the basic care and health requirements of small animals, and basic skills needed to work in the animal industry. This is a hands-on program that requires students to actively participate in animal handling and care. Some heavy lifting and physical labor is involved.

1360 PM Auto Body Careers

Auto Body Careers is a project based course that provides students with the basic knowledge needed in the auto body industry. Students learn about panel and metal working, spray painting and detailing. They also learn to properly use the tools and materials used in the auto body trade. \$

1281/1280 Building Trades Careers

Building Trades Careers serves as an introduction to the building trades industry, teaching students a wide range of skills that can be used in the carpentry, masonry, electricity and plumbing trades. Students receive daily practical experience learning the proper use of hand and power tools and job safety. \$

1071/1072 Business Management and Computer Careers

Business Management and Computer Careers teaches students to run their own business while using Microsoft Office Suite and Adobe software (Photoshop/Dreamweaver). Students participate in a class-run desktop publishing and graphics business. They learn marketing, advertising and how to design their own websites. Several on-campus and off-campus internships and co-ops are available. Additionally, students are prepared for IC3, Microsoft Office Suite and OSHA certifications.

1340/1341 General Automotive Services (GAS)

GAS serves as an introduction to the automotive trades' field. The course is a project based course that gives students the opportunity to use a variety of skills to complete automotive projects. Projects will include automotive repair, welding, fabrication, design and metal working. \$

1261/1262 Retail Skills/Supermarket Careers

Retail Skills/Supermarket Careers provides experience working in a retail grocery store setting. Students learn basic retail skills and functions such as electronic cash register operation, stockroom procedures, pricing policies, proper handling of perishable foods, merchandising, market, and customer service/sales techniques. Students also study safety, communications, human relations, and front-end operations. All skills and techniques are taught to apply to all facets of the retail industry.

1016/1017 Hospitality Industry Careers

Hospitality Industry Careers provides hands-on, real world training in the operation of hotels, resorts, spas, clubs and air and cruise line agencies. Through co-op study, job shadowing and internships at area businesses, students learn about accommodations, lodging, travel reservations, sales, marketing and guest services.

BOCES Intermediate Courses

These two-year courses are designed to engage students and provide them with a foundation to develop a lifelong career. **These courses are geared toward students on track to receive a Regents diploma.**

1131/1132 Animal Science

Animal Science provides instruction in the care, grooming, and health requirements of animals, and in operating procedures for animal care businesses. Students gain the practical experience needed for entry-level jobs through classroom study and operation of the pet supply store, grooming shop, boarding kennel and cat/dog rescue/adoption center. Some heavy lifting and physical labor is involved.

1081/1082 Auto Body Repair

Auto Body Repair provides daily practical experience in the latest techniques of auto body repair. Students learn about hand/power tools, panel and metal working, spray painting, car refinishing, detailing and pin-stripping. The skills taught include repairing dents and rust, priming, sand blasting, spray painting and reconditioning of vehicles. Also taught are collision work, vehicle restoration, welding, fiberglass, glass and plastic repairs and PPG paint mixing. \$

This course requires a mechanical aptitude placement test.

1021/1022 Carpentry

Carpentry provides students with the entry level skills necessary for employment in the construction field. Students receive daily practical experience using state-of-the-art tools, supplies, equipment and machines. Instruction is provided in blueprint reading, roofing, siding, basic framing and finishing of residential homes. Students learn the proper use of hand and power tools, applying this knowledge to laboratory exercise and actual job-site projects. Emphasis is placed on related math, estimating, computer and employment skills. This is a nationally accredited course through NCCER. \$\$

1221/1222 Computer Aided Design (CAD) and 3D Animation

CAD and 3D Animation provides complete training for a career in the field. Students use the most advanced, industry-standard hardware and software to create accurate and precise architectural and engineering drawings. They also learn to create world-class images and 3D animations used in numerous high-tech design careers, including robotics, bridge building, forensics, electrical power distribution, entertainment and medicine.

1171/1172 Cosmetology

Cosmetology teaches theory and provides practical experience in all areas of the industry. Students, in state-of-the-art classrooms, learn styling, permanent waving, cutting, manicuring, make-overs, skin care and hair coloring techniques. Upon successful completion of the 1,000-hour state requirement and completion of the program, students are eligible to take the New York state licensing examination. \$\$\$

1152 Culinary Arts I/1151 Culinary Arts II

Culinary Arts teaches students the phases of food service operations. Students develop skills through actual work experiences in a state of the art kitchen. They will learn to prepare sauces, soups, entrees, side dishes, salads, desserts and much more. Upon completion of the course, students receive the ServSafe national credential.

This course requires a mechanical aptitude placement test.

1211 Electricity I / 1212 Electricity II

Electricity instructs students in the installation, testing, repair, and servicing of electrical equipment as well as the basic theory and fundamentals of electrical systems in residential, commercial and industrial settings. Students learn about electrical safety and construction codes, circuits and wiring, motor controls, security and lighting systems, current measurement, data cabling, transformers, diagrams, schematics, planning and estimating. This is a nationally accredited course through NCCER. \$

1061/1062 Engine Mechanics

Engine Mechanics will provide students training in both small and large engine diagnostics and repair. Students will learn automotive skills including: chassis service, tire and wheel service, lubrication systems, brakes and troubleshooting strategies. Upon completion of the course, students take the EETC Four-Stroke Engine Certification. \$

This course requires a mechanical aptitude placement test.

1111/1112 Heavy Equipment Repair and Operation

Heavy Equipment Repair and Operation provides students the opportunity to learn the maintenance, operation, testing, and repair of heavy equipment used in construction and agriculture. Students learn to operate, maintain, and overhaul tractors, backhoes, bulldozers, and trucks. \$

1051/1052 Masonry

Masonry teaches students the proper installation of a variety of masonry materials used in the construction business. Students learn to use a builder's level, prepare mortar, cut and shape masonry materials, set steel sectional scaffolding, construct fireplaces and arches, and build structures using brick, block, stone, tile, and concrete. They also learn power equipment, job estimates, job site preparation and safety. This program is a nationally accredited course through NCCER. \$

1031/1032 Video Production

Video Production teaches students all aspects of television and film production using state-of-the-art equipment. Students learn camera care and usage, story-boarding, editing, special effects and script-writing. The program emphasizes hands-on experience in producing documentaries, commercials, and promotional videos as well as news, radio and sports programming. Students also work on Sports Week, a weekly cable television broadcast covering sports highlights from area schools.

1251/1252 Welding

Welding teaches students the processes of welding, cutting, grinding, and custom fabrication. Students work with steel, stainless steel, aluminum, and other metals commonly found in modern industry. Daily hands-on training reinforces skills that enable students to reach entry-level proficiency in stick welding, MIG and TIG welding, flame-cutting and plasma cutting. Shop math and blueprint reading are taught. Safety practices and craftsmanship are priorities, and creative projects are encouraged. Upon completion of this program, students are able to take the AWS national welding certification exam. \$

1141/1142 Plant Science

“The BHS Curriculum Guide went to print before this course description was finalized. Please refer to www.btbooces.org for further information on this program.”

BOCES Advanced Placement Courses

These two-year courses are designed to challenge academically motivated students who are mature and able to work independently. Courses are geared toward students who are on track to receive a Regents or Advanced Regents diploma.

1091/1092 Auto Technology

Auto Technology teaches the skills necessary to troubleshoot and repair the complex systems of today's high-tech automobiles. Students learn to diagnose, adjust, and repair engines, power trains, steering/suspension systems, brakes and electrical components. Students are trained to take the ASE automotive certification. \$

This course requires a mechanical aptitude placement test.

1161/1162 Criminal Justice

Criminal Justice prepares students in the basics of law enforcement, security services and corrections. Students learn all aspects of the criminal justice system, with hands-on experience in criminal investigation, forensics, penal law, report writing, corrections and security. Students can also obtain certification in CPR, AED and first aid. Students are encouraged to continue their education at the post-secondary level. Upon successful completion of the course, students are eligible to take the New York state security guard eight-hour pre-assignment course. \$\$

1191 / 1192 Health Science

Health Science teaches students the skills necessary to provide care for individuals who are ill, aging or disabled. Students learn to observe, position, bathe, dress, exercise, transport, feed, document and take the vital signs of patients in assisted living facilities. They also learn about careers in the health care field, CPR, and basic first aid. Practical work experience is provided in local residential and school settings. Upon successful completion of the program, students are also eligible to take the New York state Nurse Assistant Certification exam and be certified as a home health aide. \$\$

1121/1122 Advanced Manufacturing

"The BHS Curriculum Guide went to print before this course description was finalized. Please refer to www.btboces.org for further information on this program."

1271/1272 IT Specialist

"The BHS Curriculum Guide went to print before this course description was finalized. Please refer to www.btboces.org for further information on this program."

1101/1102 Graphics & Gaming Design

"The BHS Curriculum Guide went to print before this course description was finalized. Please refer to www.btboces.org for further information on this program."

Broome Tioga BOCES New Vision Academics

These one-year courses are designed for college-bound seniors interested in exploring career opportunities before college. Each New Visual Academy has a competitive enrollment process.

New Visions is an academically rigorous program for college-bound high school seniors who are interested in a future career in health, education and human development, engineering, or law and government. Students in the program spend each morning taking classes, Honors Social Studies 12 and Honors English 12, and also work side-by-side with professionals, observing and participating in real life experiences and internships. Students have the option of taking their Social Studies 12 credit via Syracuse University Project Advance. In addition, all students participate in Honors English 12, which is taught seminar style and focuses on college preparedness. All applicants must have a minimum GPA of 90%. The application process includes an essay and interview. Students who complete this program earn four high school credits.

1273 Engineering Academy

- Participate in the design, creation and testing of an engineering project with local engineers
- Internships at local engineering firms
- Experience Binghamton University and their research laboratories

1342 Health Academy

- Internships with doctors, surgeons, nurses and pharmacists
- Research current trends within the health care industry
- Learn from experienced health care professionals

1291 Law and Government Academy

- Internships at the City of Binghamton and with prestigious law firms and local judicial offices
- Work with officials in both the public and private sectors of law and government
- Study the theory and practice of our systems of government and law

1303 Business Academy

- Take part in career shadowing experiences in area businesses, observing multiple types of firms and managerial sub-fields
- Participate in a product development and business plan competition
- Work with mentors in the local business community

Youth Apprenticeship Program

This program has a competitive hiring/enrollment process that requires an application, recommendations, and a job interview.

Youth Apprenticeship is designed to offer high school juniors and seniors the opportunity to see direct connections between academics and employment while working in their occupational field of interest. Students leave their home school for part of the day and work between 10 and 20 hours per week. Paid positions are offered in four career areas: Engineering Technologies, Business/Information Systems, Health Care, and Human and Public Service. Interested students must complete an application package and meet selection criteria. Participating employers interview and hire students. Students receive two credits each year for the work experience, which includes taking two required online courses, and one credit for successful completion and formal presentation of a senior project.

- Paid work experience in the field of interest
- Work with experienced professionals
- Learn marketable job skills
- Earn college credit