

GROTON BOARD OF EDUCATION
COMMITTEE OF THE WHOLE MEETING
DECEMBER 5, 2022 @ 6:00 P.M.
CENTRAL OFFICE, ROOM 11

NOTE: This meeting is being held in-person. For those attending via Zoom, please click on the meeting under District Calendar for the Zoom link.

Mission Statement: Our mission is teaching and learning.

Board Goals: In richness of cultures and with a respect for all, (1) Provide Dynamic Rigorous Curriculum, (2) Ensure Effective and Engaging Instruction, and (3) Embrace Excellent Learning Environment

AGENDA

1. Call to Order
2. Review November 21, 2022 Meeting Minutes (Attachment #1)
3. Discussion with the Fields Committee re: FHS as a Priority
4. Elementary, Middle, & High Schools' Enrollment/Class Size (Attachments #2a, #2b, #2c)
5. Update re: Improving Public Safety by Enhancing Groton Public School's Security Systems Grant
6. Adjournment

GROTON BOARD OF EDUCATION
COMMITTEE OF THE WHOLE
NOVEMBER 21, 2022 @ 6:00 P.M.
CENTRAL OFFICE, ROOM 11

MEMBERS PRESENT: Kim Shepardson Watson-Chairperson, Andrea Ackerman-Vice Chairperson, Dean Antipas, William Horgan, Liz Porter (remote), Matthew Shulman, Beverly Washington (remote),

MEMBERS ABSENT: Rita Volkmann, Jay Weitlauf

ALSO PRESENT: Susan Austin, Phil Piazza, Sam Kilpatrick, Ken Knight

I. CALL TO ORDER – Chairperson Kim Shepardson Watson called the meeting to order at 6:03 p.m.

II. BOE REGULAR BUSINESS

MOTION: Ackerman, Shulman: To approve the COW minutes of November 14, 2022
PASSED - UNANIMOUSLY

III. DISCUSSION RE CIP REQUESTS (ATTACHMENT #1)

Mr. Kilpatrick reviewed the proposed CIP requests that have been submitted to the Town for review.

- School Needs Summary – CB
- FHS Athletic Facilities
- CB Roof Replacement (Approved last year)
- NEA Air Quality
- FHS/CB HVAC Upgrades
- FHS Culinary Arts
- District Safety and Security – Mutualink
- District Safety and Security – Camera

IV. UPDATE RE: SOLAR PANELS, GMS FIELD LIGHTS AND HVAC GRANT

Solar Panels - Mr. Kilpatrick stated that the PPA was ready to be signed so that parts can be purchased for the Solar Panels.

GMS Field Lights – Mr. Kilpatrick noted that Kent & Frost are working on the plans and we are looking at ways to get through the 600 feet of conduit.

HVAC Grant – Mr. Kilpatrick noted that the grant is due on December 1, 2022 for FHS and CB. Mr. Kilpatrick noted that he working with the consultants and that the engineers were here recently.

V. DISCUSSION RE: GPS COVERING THE COST OF AP EXAMS (ATTACHMENT #2)

Superintendent Austin noted that the cost to cover exams is set for this year and next year due to Federal grants (ARP ESSER, Free/Reduced Lunch, NMSI-National Math and Science Initiative).

Mr. Knight gave an overview of the AP Test Cost Proposal. Mr. Knight noted that there are 546 instances of students taking AP courses.

Mr. Shulman asked for a breakdown of how many students the 546 instances represented.

VI. DISCUSSION RE: THE COST/SOURCE OF FUNDING OF NEW EMPLOYEES OVER THE LAST FOUR YEAR (ATTACHMENT #3)

Superintendent Austin and Mr. Knight reviewed the chart of positions added over the last four years both certified and non-certified.

VII. REVIEW OF REFERRAL TRACKING SHEET

REMOVE:

- R2021-5 Discussion of the cost of AP and IB tests and who pays for them
- R2021-8 Implementation of One Card, One Community
- R2022-2 Discussion re: a second MSAP grant
- R2022-5 Discussion re: Minority Recruitment, and an update on staffing
- R2022-14 Review and make recommendations re: the Program of Studies booklet

CHANGE R2022-8 Explore the history and/or process of a curriculum, audit at FHS and R2022-14 Review and make recommendations re: the Program of Studies booklet to read R2022-16 Review and audit of the Program of Studies for FHS and GMS.

It was suggested that R2021-9 Discussion of Educational Rising Club – Nation Organization be placed on the December COW agenda.

Mr. Shulman asked for an update on Board visits to schools.

IX. ADJOURNMENT

MOTION: Ackerman, Horgan: To adjourn at 7:20 p.m.
PASSED UNANIMOUSLY

CAPITAL IMPROVEMENT PROGRAM PROJECT DETAIL (ADDENDUM)	
PROJECT	ACTIVITY/DEPARTMENT
SCHOOL NEEDS SUMMARY	5) EDUCATION
ADDITIONAL INFORMATION	
<p>Projects for various system upgrades and replacement at the schools are listed on the individual facility project sheets. However, there are longer term needs to maintain the educational and functional adequacy that are summarized below.</p> <p>ELEMENTARY SCHOOLS</p> <p>The projects shown on the individual project sheets are intended to maintain the adequacy of the facilities in their present configuration. However, to meet educational adequacy needs in the future, Charles Barnum Elementary School will also require an expanded media center, a full-service kitchen, a larger cafetorium, a gymnasium, larger and redesigned administration spaces, additional resource and remedial program spaces, appropriate instrumental and band program spaces, an art room, a space for the school based health center, and a larger space for the school nurse. .</p>	

CAPITAL IMPROVEMENT PROGRAM
PROJECT DETAIL

PROJECT	ACTIVITY/DEPARTMENT
A) FITCH HIGH SCHOOL ATHLETIC FACILITIES	5) EDUCATION

DESCRIPTION/PURPOSE/JUSTIFICATION

In addition to the regular use of the football field by the football team, the field is also used by the Groton Public Schools lacrosse and soccer teams, as well as physical education classes. Because the playing field no longer drains properly, it is in need of upgrading. It will be necessary to regrade and recrown the field and sod the entire surface.

The addition of an irrigation system while work is performed will greatly enhance the continued maintenance by providing timed watering while also improving on the efficiency/cost of water usage.

Requested for FYE 24 are funds (\$250,000) to sod and recrown the field and funds (\$30,000) for irrigation.

RECOMMENDED FINANCING (000)

	Source of Funds*	Estimated Funding by Year						Total Estimated Cost
		FYE2023	FYE2024	FYE2025	FYE2026	FYE2027	FYE2028	
A. Planning and Engineering								0
B. Land and Right of Way								0
C. Construction	C		250					250
D. Equipment								0
E. Other Costs								0
Total	C	0	250	0	0	0	0	250

*Funding (C) Capital Reserve Fund (G) General Obligation Bonds (O) Other

CAPITAL IMPROVEMENT PROGRAM
PROJECT DETAIL

PROJECT B) CHARLES BARNUM ELEMENTARY SCHOOL ROOF REPLACEMENT	ACTIVITY/DEPARTMENT 5) EDUCATION
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DESCRIPTION/PURPOSE/JUSTIFICATION

The Board of Education plans to keep Charles Barnum Elementary School open for many years to come. As of 2021, that building will be the only school in the district that is older than 14 years. The roof on the building is beyond its 20-year life expectancy.

Requested for FYE 23 are funds (\$1,000,000) for roof replacement.

Approved last year

RECOMMENDED FINANCING (000)

	Source of Funds*	Estimated Funding by Year						Total Estimated Cost
		FYE2023	FYE2024	FYE2025	FYE2026	FYE2027	FYE2028	
A. Planning and Engineering								0
B. Land and Right of Way								0
C. Construction	C	1000						1000
D. Equipment								0
E. Other Costs								0
Total	C	1000	0	0	0	0	0	1000

*Funding (C) Capital Reserve Fund (G) General Obligation Bonds (O) Other

CAPITAL IMPROVEMENT PROGRAM
PROJECT DETAIL

PROJECT	ACTIVITY/DEPARTMENT
C) NORTHEAST ACADEMY AIR QUALITY	5) EDUCATION

DESCRIPTION/PURPOSE/JUSTIFICATION

There have been concerns about excessive humidity in the Northeast Academy. The district contracted with the engineering firm Fuss & O'Neill to determine the cause and possible remedy for this issue. The study concluded with recommendations for both short and long term solutions.

The long-term recommendation in the engineering report is the replacement of the air handling units

The initial work for the short-term equipment upgrades was completed during the spring of 2020.

The Board recommends postponing the replacement of the air handling units until FYE 25 and beyond. During the spring of 2020 the maintenance staff implemented an active dehumidification program that mitigated the humidity problem. The HVAC technician will continue to monitor the air quality of the building.

Programmed for FYE 25-28 are funds (\$250,000/year estimated) for replacement of the air handling units.

RECOMMENDED FINANCING (000)

	Source of Funds*	Estimated Funding by Year						Total Estimated Cost
		FYE2023	FYE2024	FYE2025	FYE2026	FYE2027	FYE2028	
A. Planning and Engineering								0
B. Land and Right of Way								0
C. Construction								0
D. Equipment	C			250	250	250	250	1000
E. Other Costs								0
Total	C	0	0	250	250	250	250	1000

*Funding (C) Capital Reserve Fund (G) General Obligation Bonds (O) Other

CAPITAL IMPROVEMENT PROGRAM
PROJECT DETAIL

PROJECT D) FITCH HIGH & BARNUM SCHOOLS HVAC UPGRADES	ACTIVITY/DEPARTMENT 5) EDUCATION
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DESCRIPTION/PURPOSE/JUSTIFICATION

While many areas of Fitch High School were renovated in the 2008 building project, the vintage section did not get an updated HVAC system.

Charles Barnum Elementary School, built in the 1960's, has the original HVAC systems.

The Board of Education is funding the study and plans for the expected upgrades. Once this has been completed the construction and equipment estimate will be included in next years CIP.

RECOMMENDED FINANCING (000)

	Source of Funds*	Estimated Funding by Year						Total Estimated Cost
		FYE2023	FYE2024	FYE2025	FYE2026	FYE2027	FYE2028	
A. Planning and Engineering	C							0
B. Land and Right of Way								0
C. Construction								0
D. Equipment								0
E. Other Costs								0
Total	C	0	0	0	0	0	0	0

*Funding (C) Capital Reserve Fund (G) General Obligation Bonds (O) Other

**CAPITAL IMPROVEMENT PROGRAM
PROJECT DETAIL**

PROJECT	ACTIVITY/DEPARTMENT
E) FITCH HIGH SCHOOL CULINARY ARTS	5) EDUCATION

DESCRIPTION/PURPOSE/JUSTIFICATION

With the Groton Public Schools' focus on college and career readiness, we are expanding our Careers Pathway program to ensure our students are workforce ready. A very popular career pathway for our students is the Culinary Arts Program. The program fills to capacity and many students are turned away. There is a need for a more robust culinary arts program that can service more of our students and ready them for entry level jobs in the restaurant industry. This would require upgrading of the current cooking/cleaning stations to more commercial grade equipment.

Requested for FYE 24 are funds estimated at (\$600,000) for the construction and equipment to complete the project.

RECOMMENDED FINANCING (000)

	Source of Funds*	Estimated Funding by Year						Total Estimated Cost
		FYE2023	FYE2024	FYE2025	FYE2026	FYE2027	FYE2028	
A. Planning and Engineering	C							0
B. Land and Right of Way								0
C. Construction			400					400
D. Equipment			200					200
E. Other Costs								0
Total	C	0	600	0	0	0	0	600

*Funding (C) Capital Reserve Fund (G) General Obligation Bonds (O) Other

**CAPITAL IMPROVEMENT PROGRAM
PROJECT DETAIL**

PROJECT District Safety & Security	ACTIVITY/DEPARTMENT Education
PROJECT NAME	SECTION NUMBER AND TITLE

DESCRIPTION/PURPOSE/JUSTIFICATION

As concerns continue with schoolplace incidents, providing a means for first responders to see in real time is highly recommended. Mutuallink would give access to school cameras on an as needed basis to assist in the timely mitigation of a critical event . The system would connect both communications and cameras to school administrators and local police authority.
Requested for FYE24 is \$150,000.

RECOMMENDED FINANCING (000)

	Source of Funds	Estimated Funding by Year						Total Estimated Cost
		FYE2024	FYE2025	FYE2026	FYE2027	FYE2028	FYE2029	
A. Planning and Engineering								
B. Land and Right of Way								
C. Construction								
D. Equipment		150						150
E. Other Costs								
Total								150

*Funding (C) Capital Reserve Fund (G) General Obligation Bonds
(O) Other

**CAPITAL IMPROVEMENT PROGRAM
PROJECT DETAIL**

PROJECT District Safety & Security	ACTIVITY/DEPARTMENT Education
PROJECT NAME Cameras	SECTION NUMBER AND TITLE

DESCRIPTION/PURPOSE/JUSTIFICATION

Four (CB, CK, NEA, FHS) of the seven Groton Public Schools are in need of upgraded security cameras (internal and external) and camera management systems. Currently, each school has its own standalone system. To effectively address emergency issues in our schools, a federated system of camera access controls across all schools with real-time access for School Administrators, Groton PD, and first responders is required. This proposal would provide funding to address these needs and to prepare for the Mutalink system proposed by the Board of Education to be used with Groton Police Departments .
Request for FYE24 is \$245,000

RECOMMENDED FINANCING (000)

	Source of Funds	Estimated Funding by Year						Total Estimated Cost
		FYE2024	FYE2025	FYE2026	FYE2027	FYE2028	FYE2029	
A. Planning and Engineering								
B. Land and Right of Way								
C. Construction								
D. Equipment		245						245
E. Other Costs								
Total								245

*Funding (C) Capital Reserve Fund (G) General Obligation Bonds
(O) Other

Groton Public Schools
 AP Test Cost Proposal
 Fiscal Year 2023

Course Name	Free	Reduced	Full Pay	Grand Total	Cost @ 100% Testing (\$88/exam)	Free/Reduced Meal Students (CSDE pays)	Cost after reduction for Free/Reduced Meal Students	NMSI Portion (50% of paid)	Cost to GPS
AP Government	22	7	99	128	\$11,264.00	\$2,552.00	\$8,712.00	\$0.00	\$8,712.00
AP UCONN ECE 11 Intr to Academic Writing	15	3	72	90	\$7,920.00	\$1,584.00	\$6,336.00	\$3,168.00	\$3,168.00
AP US History	16	5	54	75	\$6,600.00	\$1,848.00	\$4,752.00	\$0.00	\$4,752.00
AP UCONN ECE English 12	14	5	54	73	\$6,424.00	\$1,672.00	\$4,752.00	\$0.00	\$4,752.00
AP Psychology	12	3	52	67	\$5,896.00	\$1,320.00	\$4,576.00	\$0.00	\$4,576.00
AP Physics I	3	2	28	33	\$2,904.00	\$440.00	\$2,464.00	\$1,232.00	\$1,232.00
AP Calculus A-B	2	1	17	20	\$1,760.00	\$264.00	\$1,496.00	\$748.00	\$748.00
AP Environmental	1	1	17	19	\$1,672.00	\$176.00	\$1,496.00	\$748.00	\$748.00
AP Biology Yr	2	1	14	17	\$1,496.00	\$264.00	\$1,232.00	\$616.00	\$616.00
AP Computer Science	2	1	6	9	\$792.00	\$264.00	\$528.00	\$264.00	\$264.00
AP Music Theory	2	0	7	9	\$792.00	\$176.00	\$616.00	\$0.00	\$616.00
AP UCONN ECE Statistics	0	0	6	6	\$528.00	\$0.00	\$528.00	\$264.00	\$264.00
Total	91	29	426	546	\$48,048.00	\$10,560.00	\$37,488.00	\$7,040.00	\$30,448.00

Groton Public Schools
Positions added

Grant Funded					
Certified Position	Location	FTE	Amount	Funding FY23	Funding FY24
Social Worker	MRM	1.0	62,900	ARP ESSER	ARP ESSER
Social Worker	GMS	0.5	37,529	ARP ESSER	ARP ESSER
Social Worker	CB/NEA	1.0	58,229	ARP ESSER	ARP ESSER
Special Education	TRM/MRM	1.0	60,742	ARP ESSER	ARP ESSER
Special Education	MRM/FHS	1.0	58,229	ARP ESSER	ARP ESSER
Math Specialist	MRM	1.0	68,510	ARP ESSER	ARP ESSER
Mathematics	FHS	1.0	55,464	ARP ESSER	ARP ESSER
Magnet Theme Teacher	MRM/TRM/CB	1.0	55,464	ARP ESSER	ARP ESSER
BCBA	District	1.0	92,820	ARP IDEA	Board funded
Social Worker	TRM/MRM	1.0	78,347	ARP IDEA	Apply for Mental Health Grant
Special Education	FHS	1.0	55,961	ESSER II Spec Ed	Board funded
Bilingual	GMS	1.0	54,257	Alliance District	Alliance?/Title III 50%
Health Science	FHS	1.0	65,000	Vacant FY23	DODEA Pathways
Project Lead the Way	GMS	1.0	55,464	ARP ESSER	ARP ESSER
Pathways Coordinator	FHS	1.0	106,486	CPP Career Pathways	ARP ESSER
Subtotal Certified		14.5	965,402		
Non-certified Position	Location	FTE	Amount	Funding FY23	Funding FY24
Prog Coordinator	GMS	0.25	14,919	Roots Program	Roots Program
Prog Aides	GMS	0.5	8,452	Roots Program	Roots Program
Prog Assistant	GMS	0.5	5,184	Roots Program	Roots Program
ELA/Math Tutors	District	17.0	644,109	ARP ESSER	ARP ESSER
Tech Support	District	1.0	64,260	ARP ESSER	ARP ESSER
PT Custodial	District	3.5	88,690	ARP ESSER	ARP ESSER
SEL Tutors	District	8.0	303,110	ARP ESSER	ARP ESSER
Security Guards	FHS/GMS	7.0	350,368	ARP ESSER/Board funded	ARP ESSER/Board funded
Subtotal Non-certified		37.8	1,479,092		

Already in Budget					
Position	Location	FTE	Amount	Funding FY23	Funding FY24
Special Ed	FHS	1.0	56,415	Board Budget	Board Budget
ASL Teacher	FHS	1.0	100,816	Board Budget	Board Budget
Literacy Spec	FHS	0.5	47,078	Board Budget	Board Budget
Student Data Manager	District	1.0	121,646	Board Budget	Board Budget
Athletic Trainer	FHS/GMS	1.0	48,960	Board Budget	Board Budget
Subtotal Non-certified		4.5	374,915		

2022-2023 Elementary Enrollment

School	Grade	Enrollment as of 11/18/2022	FTE	Avg Class Size	October 1, 2022
Catherine Kolnaski	K	69	4.0	17.3	71
	1	72	4.0	18.0	70
	2	53	3.0	17.7	55
	3	56	3.0	18.7	56
	4	54	3.0	18.0	56
	5	45	3.0	15.0	45
	Total	349			353
Charles Barnum	K	54	3.0	18.0	56
	1	66	3.0	22.0	65
	2	51	3.0	17.0	54
	3	63	3.0	21.0	66
	4	55	3.0	18.3	57
	5	46	3.0	15.3	45
	Total	335			343
Mystic River	Preschool	79	4.0	19.8	79
	Pre-K	21	1.0	21.0	19
	K	77	4.0	19.3	77
	1	82	4.0	20.5	82
	2	69	4.0	17.3	70
	3	52	3.0	17.3	53
	4	57	3.0	19.0	58
	5	85	4.0	21.3	85
	Total	522			523
Northeast Academy	K	67	4.0	16.8	69
	1	56	3.0	18.7	57
	2	65	3.0	21.7	65
	3	75	4.0	18.8	76
	4	65	3.0	21.7	64
	5	61	3.0	20.3	61
	Total	389			392
Thames River	Preschool	72	3.0	24.0	73
	Pre-K	22	1.0	22.0	22
	TK	15	1.0	15.0	15
	K	77	4.0	19.3	74
	1	76	4.0	19.0	76
	2	76	4.0	19.0	72
	3	84	4.0	21.0	85
	4	52	3.0	17.3	51
	5	58	3.0	19.3	58
	Total	532			526
Total Elementary:		2127			2137

Groton Middle School

Course #	Course Name	Term	No of Section	Total Students	Avg No of Students
HPE500	ADPE	S1	1	13	13
HPE500	ADPE	S2	1	12	12
ART800	Advanced Art	S1	3	48	16
ART800	Advanced Art	S2	3	53	17.7
SST505	Advanced Debate	S1	1	9	9
SST505	Advanced Debate	S2	1	22	22
MAT710	Advanced Math 7	22-23	6	108	18
6412	American Sign Language I	22-23	1	19	19
CSC811	App Creator	S1	3	52	17.3
CSC811	App Creator	S2	2	31	15.5
ATL503	Approaches to Learning	Q1	4	77	19.3
ATL503	Approaches to Learning	Q2	4	85	21.3
ATL503	Approaches to Learning	Q3	4	69	17.3
ATL503	Approaches to Learning	Q4	4	69	17.3
SCI501	Aquatic Science	S1	3	45	15
SCI501	Aquatic Science	S2	3	59	19.7
ART600	Art 6	Q1	4	86	21.5
ART600	Art 6	Q2	4	79	19.8
ART600	Art 6	Q3	4	69	17.3
ART600	Art 6	Q4	4	69	17.3
CSC810	Automation and Robotics	S1	2	45	22.5
CSC810	Automation and Robotics	S2	3	54	18
COM501	Broadcasting	S1	2	42	21
COM501	Broadcasting	S2	2	42	21
ATL501	Calm the Chaos	S1	4	51	12.8
ATL501	Calm the Chaos	S2	4	64	16
1999	Case Manager	22-23	8	104	13
1999	Case Manager	Q1	1	31	31
MUS506	Chorus	22-23	8	153	19.1
MUS507	Chorus Semester	S1	8	78	9.8
MUS507	Chorus Semester	S2	8	77	9.6
CSC500	Coding	S1	9	168	18.7
CSC500	Coding	S2	8	160	20
CSC505	Comp Sci for Innovators & Makers	S1	3	43	14.3
CSC505	Comp Sci for Innovators & Makers	S2	3	25	8.3
MUS503	Concert Band	22-23	3	102	34
MUS501	Concert Orchestra	22-23	2	40	20
1117	Current Events	S1	2	31	15.5
1117	Current Events	S2	2	33	16.5
HPE503	Dance	S1	1	20	20
HPE503	Dance	S2	1	18	18
SST504	Debate	S1	3	52	17.3
SST504	Debate	S2	3	61	20.3
DES502	Design and Modeling	S1	6	134	22.3
DES502	Design and Modeling	S2	7	159	22.7

Groton Middle School

Course #	Course Name	Term	No of Section	Total Students	Avg No of Students
SCI507	Energy and the Environment	S1	1	23	23
SCI507	Energy and the Environment	S2	1	21	21
DES506	Flight and Space	S1	2	47	23.5
DES506	Flight and Space	S2	2	39	19.5
FRE600	French 6	S1	8	140	17.5
FRE600	French 6	S2	8	142	17.8
FRE700	French 7	22-23	2	28	14
FRE110	French I	22-23	3	41	13.7
DES505	Green Architecture	S1	1	20	20
DES505	Green Architecture	S2	2	38	19
MUS514	Guitar	S1	3	53	17.7
MUS514	Guitar	S2	5	85	17
HPE508	Health & Strengthen & Balance	S1	7	125	17.9
HPE508	Health & Strengthen & Balance	S2	7	143	20.4
HPE601	Health 6	S1	9	175	19.4
HPE601	Health 6	S2	8	128	16
HPE802	Health and Fitness	S1	8	147	18.4
HPE802	Health and Fitness	S2	8	144	18
MAT110	Honors Algebra I	22-23	6	126	21
ART700	Intermediate Art	S1	5	108	21.6
ART700	Intermediate Art	S2	5	104	20.8
SCI503	It's Not Magic It's Science	S1	5	61	12.2
SCI503	It's Not Magic It's Science	S2	5	31	6.2
ENG506	Language Arts	22-23	4	25	6.3
ENG600	Language Arts 6	22-23	15	307	20.5
ENG700	Language Arts 7	22-23	15	273	18.2
ENG800	Language Arts 8	22-23	15	295	19.7
SST508	Leadership	S1	4	64	16
SST508	Leadership	S2	3	45	15
DES500	Magic of Electrons	S1	2	34	17
DES500	Magic of Electrons	S2	2	27	13.5
SCI504	Marine Biology	S1	5	71	14.2
SCI504	Marine Biology	S2	5	70	14
MAT600	Math 6	22-23	15	307	20.5
MAT700	Math 7	22-23	10	164	16.4
MAT800	Math 8	22-23	11	172	15.6
DES503	Medical Detectives	S1	4	52	13
DES503	Medical Detectives	S2	4	73	18.3
COM504	Multimedia 2	S2	2	33	16.5
COM503	Multimedia I	S1	8	159	19.9
COM503	Multimedia I	S2	6	141	23.5
MUS600	Music 6	S1	4	48	12
MUS600	Music 6	S2	4	47	11.8
MUS500	Music Technology	S1	3	53	17.7
MUS500	Music Technology	S2	2	41	20.5

Groton Middle School

Course #	Course Name	Term	No of Section	Total Students	Avg No of Students
MUS502	Musical Theater	S1	2	44	22
MUS502	Musical Theater	S2	2	46	23
HPE600	PE 6	S1	8	147	18.4
HPE600	PE 6	S2	8	163	20.4
HPE700	PE 7	S1	7	128	18.3
HPE700	PE 7	S2	7	142	20.3
HPE800	PE 8	S1	7	157	22.4
HPE800	PE 8	S2	7	140	20
MUS508	Playwriting	S1	2	30	15
SCI600	Science 6	22-23	15	307	20.5
SCI700	Science 7	22-23	15	273	18.2
SCI800	Science 8	22-23	14	299	21.4
DES504	Science of Technology	S1	3	53	17.7
DES504	Science of Technology	S2	2	39	19.5
SST600	Social Studies 6	22-23	15	307	20.5
SST700	Social Studies 7	22-23	15	273	18.2
SST800	Social Studies 8	22-23	15	298	19.9
SPA600	Spanish 6	S1	7	141	20.1
SPA600	Spanish 6	S2	7	144	20.6
SPA700	Spanish 7	22-23	12	215	17.9
SPA110	Spanish I	22-23	11	228	20.7
7177	Stock Market	S2	1	24	24
MUS505	Symphonic Band	22-23	3	75	25
MUS511	Symphonic Orchestra	22-23	2	50	25
ENG500	Theater	S1	4	83	20.8
ENG500	Theater	S2	4	91	22.8
1870	Video Production	S1	3	51	17
1870	Video Production	S2	2	37	18.5
MUS518	World Drumming	S1	3	51	17
MUS518	World Drumming	S2	3	31	10.3
SST509	World Poverty	S1	1	23	23
SST509	World Poverty	S2	1	13	13

Fitch High School

Course #	Course Name	Term	No of Section	Total Students	Avg No of Students
7156	Accounting I	22-23	1	13	13
7353	Adaptive Foods	S2	1	11	11
2077	Adolescent Literature	S2	1	8	8
5036	AfricanAm/Blk & PuertoRic/Lat Studies	22-23	2	33	16.5
3212	Algebra I	22-23	13	190	14.6
3082	Algebra II	22-23	9	121	13.4
3241	Algebra III	22-23	3	53	17.7
6412	American Sign Language I	22-23	1	25	25
6413	American Sign Language II	22-23	2	40	20
7843	Animation	22-23	3	35	11.7
4941	AP Biology Yr	22-23	1	17	17
3944	AP Calculus A-B	22-23	2	20	10
7167	AP Computer Science	22-23	1	9	9
4944	AP Environmental	22-23	1	19	19
3022	AP Government	22-23	7	127	18.1
7669	AP Music Theory	22-23	1	9	9
4945	AP Physics I	22-23	2	33	16.5
5947	AP Psychology	22-23	3	66	22
7931	AP UCONN ECE 11 Intr to Academic Writing	22-23	5	90	18
2941	AP UCONN ECE English 12	22-23	4	73	18.3
7953	AP UCONN ECE Statistics	22-23	1	6	6
5931	AP US History	22-23	4	74	18.5
3363	APEX Virtual Academy S1	S1	11	229	20.8
3364	APEX Virtual Academy S2	S2	10	195	19.5
7851	Architectural CAD I	22-23	1	14	14
7076	Art 1	S1	6	110	18.3
7076	Art 1	S2	4	77	19.3
7077	Art 2	S1	1	11	11
7077	Art 2	S2	2	34	17
7078	Art 3	22-23	2	18	9
7755	Basketball	S1	2	53	26.5
7755	Basketball	S2	1	23	23
4221	Biology I	22-23	8	137	17.1
2243	Black Literature	22-23	1	5	5
4055	Botany	S1	1	23	23
4055	Botany	S2	1	22	22
7171	Business & Personal Law .5	S1	1	12	12
7171	Business & Personal Law .5	S2	1	8	8
7155	Business Management & Entrepreneurship	22-23	2	20	10
1999	Case Manager	22-23	17	265	15.6
4132	Chemistry	22-23	8	123	15.4
2065	Children's Literature .5	S1	1	20	20
5251	Civics	S1	3	54	18
5251	Civics	S2	3	53	17.7
3085	College Readiness Mathematics	22-23	4	64	16

Fitch High School

Course #	Course Name	Term	No of Section	Total Students	Avg No of Students
7688	Concert Band	22-23	1	31	31
7659	Concert Chorus	22-23	1	24	24
2070	Creative Writing .5	S1	2	27	13.5
2070	Creative Writing .5	S2	2	32	16
7451	Culinary Arts I	22-23	3	46	15.3
1115	Current Events	S1	2	43	21.5
1115	Current Events	S2	1	20	20
7553	Diversified Health Occupation	22-23	3	44	14.7
2301	ELL Coaching .5	S1	2	23	11.5
2301	ELL Coaching .5	S2	2	23	11.5
2221	English 10	22-23	7	115	16.4
2231	English 11	22-23	7	121	17.3
2241	English 12	22-23	7	109	15.6
2211	English 9	22-23	9	106	11.8
4056	Environmental Sci	S1	1	20	20
4056	Environmental Sci	S2	1	18	18
7351	Foods I	22-23	8	125	15.6
6211	French I	22-23	1	9	9
6221	French II	22-23	2	19	9.5
6231	French III	22-23	1	15	15
7711	Freshman PE	S1	8	164	20.5
7711	Freshman PE	S2	4	95	23.8
1826	Freshmen Academic Seminar (FAS) .5	S1	18	255	14.2
2088	Gaming Narratives .5	S1	1	23	23
2088	Gaming Narratives .5	S2	1	14	14
3222	Geometry	22-23	14	209	14.9
2023	Global Citizenship .5	S2	18	255	14.2
3023	Government 11-12	22-23	1	7	7
7854	Graphic Comm	22-23	1	5	5
7066	Graphic Design	22-23	3	37	12.3
2085	Graphic Novels .5	S1	1	14	14
2085	Graphic Novels .5	S2	1	15	15
7687	Guitar I	22-23	1	20	20
7690	Guitar II	22-23	1	3	3
6204	Hon Spanish for Spanish Speakers II	22-23	1	19	19
7759	Honors Advanced PE	22-23	1	15	15
3111	Honors Algebra II	22-23	6	97	16.2
6414	Honors American Sign Language III	22-23	1	7	7
4121	Honors Biology I	22-23	6	120	20
3083	Honors Calculus	22-23	2	22	11
7649	Honors Chamber Choir	22-23	1	19	19
4131	Honors Chemistry	22-23	5	95	19
2121	Honors English 10	22-23	8	140	17.5
2111	Honors English 9	22-23	8	147	18.4
4052	Honors Forensic Science	22-23	3	69	23

Fitch High School

Course #	Course Name	Term	No of Section	Total Students	Avg No of Students
6111	Honors French II	22-23	1	15	15
6121	Honors French III	22-23	1	19	19
3121	Honors Geometry	22-23	3	54	18
4243	Honors Human Biology	22-23	1	14	14
4111	Honors Inte Sci	22-23	7	134	19.1
7647	Honors Jazz Band	22-23	1	15	15
4141	Honors Marine Bio	22-23	1	11	11
7255	Honors Marketing II	22-23	1	6	6
7552	Honors Nursing Assistant	22-23	1	5	5
7175	Honors Personal Finance I .5	S1	1	20	20
7175	Honors Personal Finance I .5	S2	2	29	14.5
7174	Honors Personal Finance II .5	S1	1	6	6
7174	Honors Personal Finance II .5	S2	1	9	9
7760	Honors Personal Training	S2	1	4	4
7073	Honors Photo III	S1	1	8	8
7073	Honors Photo III	S2	1	7	7
7888	Honors PLTW Introduction to Engineering	22-23	1	12	12
7833	Honors PLTW Computer Integrated Mfg.	22-23	1	8	8
7831	Honors PLTW Principles of Engineering	22-23	1	11	11
3131	Honors Pre-Calc	22-23	4	63	15.8
6112	Honors Span II	22-23	5	87	17.4
6122	Honors Span III	22-23	2	38	19
7692	Honors String Orchestra	22-23	1	14	14
5125	Honors US History	22-23	4	69	17.3
5124	Honors World History	22-23	7	124	17.7
2076	Horror Stories .5	S1	2	44	22
2076	Horror Stories .5	S2	2	42	21
6837	IB AB Initio Spanish	22-23	1	9	9
71B3	IB Business Management I	22-23	1	8	8
71B5	IB Business Management II	22-23	1	3	3
4842	IB Chemistry 11	22-23	1	12	12
6147	IB Classical Studies in Latin	22-23	1	5	5
2831	IB English 11	22-23	2	31	15.5
2841	IB English 12	22-23	1	11	11
6831	IB French 11	22-23	1	10	10
5831	IB History The Americas 11	22-23	1	4	4
5832	IB History World History HL 12	22-23	1	5	5
3840	IB Math HL 11th Grade	22-23	1	7	7
3842	IB Math HL 12th Grade	22-23	1	2	2
3830	IB Math SL 11th Grade	22-23	1	16	16
3831	IB Math SL 12th Grade	22-23	1	4	4
4848	IB Physics 12	22-23	1	5	5
5948	IB Psychology 2	22-23	1	8	8
6833	IB Spanish 11	22-23	1	17	17
6834	IB Spanish 12	22-23	1	2	2

Fitch High School

Course #	Course Name	Term	No of Section	Total Students	Avg No of Students
6899	IB Sports Exercise and Health Science	22-23	1	19	19
6900	IB Sports Exercise and Health Science II	22-23	1	5	5
2834	IB Theater Arts I	22-23	1	8	8
2832	IB Theory of Knowledge 11	S2	1	16	16
2833	IB Theory of Knowledge 12	S1	1	4	4
4211	Int Science	22-23	9	123	13.7
5239	Intro to Economics	S2	1	20	20
7856	Intro to Manufacturing	S1	1	11	11
7856	Intro to Manufacturing	S2	1	7	7
5238	Intro To Psychology	S1	2	39	19.5
5238	Intro To Psychology	S2	3	61	20.3
7062	Jewelry and Metals	22-23	3	54	18
2083	Journalism .5	S1	1	16	16
2083	Journalism .5	S2	1	13	13
7858	Manufacturing Technology I	22-23	1	3	3
7651	Marching Band	S1	1	25	25
4241	Marine Biology	22-23	1	23	23
5233	Maritime History Part I	S1	1	22	22
5234	Maritime History Part II	S2	1	21	21
7251	Marketing I	22-23	2	29	14.5
4059	Meteorology	S1	1	19	19
4059	Meteorology	S2	1	21	21
7172	Microsoft Office I .5	S1	1	7	7
7172	Microsoft Office I .5	S2	1	9	9
2058	Mythology	S1	2	33	16.5
2058	Mythology	S2	2	36	18
7756	Net Sports	S1	1	29	29
2082	Oral Communication I .5	S1	2	37	18.5
2082	Oral Communication I .5	S2	2	43	21.5
2061	Oral Communication II	S1	1	9	9
2061	Oral Communication II	S2	1	13	13
7757	PE Activities	S2	2	57	28.5
7630	Percussion Ensemble	22-23	1	7	7
7262	Personal Finance I .5	S1	3	59	19.7
7262	Personal Finance I .5	S2	2	40	20
7369	Personal Health .5	S1	7	122	17.4
7369	Personal Health .5	S2	7	142	20.3
7072	Photo I .5	S1	4	71	17.8
7072	Photo I .5	S2	4	73	18.3
7071	Photo II .5	S1	1	17	17
7071	Photo II .5	S2	1	20	20
4145	Physics	22-23	2	25	12.5
3088	Reading Success	22-23	5	19	3.8
8053	Resource	22-23	20	145	7.3
7368	Safety and Wellness .5	S1	6	139	23.2

Fitch High School

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7368	Safety and Wellness .5	S2	7	132	18.9
3055	SAT Prep	S1	1	16	16
3055	SAT Prep	S2	1	16	16
7069	Sculpture I	22-23	3	58	19.3
5235	Sociology Part 1	S1	2	43	21.5
5236	Sociology Part 2	S2	1	22	22
7712	Sophomore PE	S1	4	97	24.3
7712	Sophomore PE	S2	7	162	23.1
6205	Spanish for Spanish Speakers I	22-23	1	19	19
6212	Spanish I	22-23	4	78	19.5
6222	Spanish II	22-23	8	149	18.6
6232	Spanish III	22-23	4	73	18.3
6241	Spanish IV	22-23	1	8	8
6839	Sports Literature .5	S1	1	14	14
6839	Sports Literature .5	S2	1	21	21
3012	Statistics and Probability	22-23	3	49	16.3
7670	String Orchestra	22-23	1	19	19
5331	US History	22-23	7	142	20.3
7821	Video Production I	22-23	2	23	11.5
7841	Video Production II	22-23	1	5	5
7366	Work Place Experience	22-23	2	22	11
5214	World History	22-23	9	129	14.3
7752	Wt Training	S1	1	21	21
7752	Wt Training	S2	2	31	15.5
2081	Yearbook	22-23	2	38	19
4322	Zoology	22-23	2	32	16