NOTICE OF PUBLIC HEARING

Date of Meeting: July 19, 2021
Day of the Week: Monday
Location: LGI Room 120, North Middlesex Regional High School, 19 Main Street, Townsend, MA 01469

Please enter through Door #2, turn left and follow the corridor to the Large Group Instruction Room 120.

AGENDA

1. The Chairperson hereby informs the Committee and audience members of the recording of this meeting.
2. Roll Call
3. The next scheduled meeting of the North Middlesex Regional School Committee will be held at 7:00 p.m. on Monday, August 16, 2021, via telephone conference.

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<tr>
<th>7:00</th>
<th>CALL TO ORDER</th>
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<tr>
<td>7:00-7:05</td>
<td>CONSENT AGENDA – VOTES MAY BE TAKEN</td>
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- Approval of Minutes
  - June 21, 2021
- Accounts Payable Warrants
  - #21-0611 $26,854.99
  - #21-0617 $385,770.15
  - #21-0624 $367,801.74
  - #21-0628 $155,114.46
  - #21-0630 $208,645.79
  - #21-0631 $848,423.68
  - #21-0632 $395,272.22
- Payroll Warrants:
  - July 1, 2021
  - July 8, 2021
  - July 15, 2021
- Disposal of Surplus Property - SMS
  - Scott Foresman Reading Materials
  - Steps to Respect Curriculum Box
  - Antiquated Library Books
- Donations:
$1,500 to North Middlesex Regional High School from The Blackbaud Giving Fund agent, YourCause, to help defray the cost of supplies and materials needed within the science department.

$150 to North Middlesex Regional High School from The Blackbaud Giving Fund agent, YourCause, to help defray the cost of supplies and materials needed within the science department.

*Suggested motion: Move that the School Committee approve the consent agenda as presented.*
2. North Middlesex Regional High School 2021-22 Program of Studies — T. McMahon

   **Suggested motion:** Move that the School Committee approve the 2021-2022 North Middlesex High School Program of Studies as presented.

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<tr>
<th>Time</th>
<th>Agenda Item</th>
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| 8:00-8:05 | **SUBCOMMITTEE REPORTS – VOTES MAY BE TAKEN**  
1. Accelerated Repair (L. Martin)  
2. Building Committee (R. Templeton)  
3. Finance (L. Martin)  
4. Negotiation & Personnel (T. Casey)  
5. Policy (R. Rusch)  
The Policy Subcommittee recommends the School Committee approve the following policies for first readings:  
1. IJNDC – Internet Publication  
2. DN – School Property Disposal  
3. JCA – Assignment of Students to Schools  
   **Suggested motion:** Move that the School Committee approve policy IJNDC, DN, and JCA as presented for first readings. | ACTION |

| 8:05-8:10 | **OTHER BUSINESS NOT REASONABLY ANTICIPATED WITHIN 48 HOURS OF MEETING** | ACTION |

| 8:10-8:20 | **EXECUTIVE SESSION – VOTES MAY BE TAKEN**  
**Suggested motion:** Move that the School Committee meets in executive session pursuant to M.G.L. Chapter 30A, sec. 21(a) for the following purpose:  
- **Purpose (2):** To conduct strategy sessions in preparation for negotiations with nonunion personnel or to conduct collective bargaining sessions or contract negotiations with nonunion personnel;  
- **Purpose (3):** To discuss strategy with respect to and in preparation for collective bargaining with the North Middlesex Regional School District Teachers, Nurses, Secretarial, Paraprofessional, and Custodial Units/Associations because an open discussion may have a detrimental effect on the bargaining position of the Committee.  
- **Purpose (7):** To comply with, or act under the authority of, any general or special law or federal grant-in-aid requirements.  
  - Executive Session Minutes  
    - March 15, 2021  
    - May 17, 2021  
    - June 21, 2021  
The Committee will reconvene in an open session. | ACTION |

| 8:20 | Memorandum of Agreement – Paraprofessionals Unit | ACTION |

| 8:25 | **ADJOURNMENT** | ACTION |

**NOTE:** The listing of matters are those reasonably anticipated by the Chair, which may be discussed at the meeting. Not all items listed may be discussed and other items not listed may also be discussed to the extent permitted by law.
MEETING MINUTES – June 21, 2021
Teleconference

PRESENT
Chairperson          Craig Hansen    Member, Pepperell
Vice-Chairperson    Michael Morgan  Member, At Large ~ Absent
                   Randee Rusch      Member, At Large
                   Thomas Casey      Member, Pepperell
                   Lisa Martin       Member, At Large
                   David Carney      Member, Pepperell
                   June McNeil       Member, Ashby
                   Jessica Funaiole  Member, Townsend
                   Susan Robbins     Member, Townsend

ALSO PRESENT
Brad Morgan              Superintendent of Schools
Nancy Milligan          Assistant Superintendent of Schools
Nancy Haines            Business Manager
Robin Eibye             Recording Secretary
Annemarie Tucciarone-Mahan Human Resources Director

See attached attendance report

1. Chairperson, Craig Hansen, opened the meeting at 7:07 pm and announced the School Committee was meeting virtually via Google Meet, practicing social distancing, and in accordance with the Governor’s suspension of specific open meeting laws.
2. Mr. Hansen informed the Committee and audience members the meeting would be recorded.

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3. Mr. Hansen informed the Committee and attendees that the North Middlesex Regional School Committee’s next scheduled meeting would be held at 7:00 p.m. on Monday, July 19, 2021, via teleconference.
APPROVAL OF CONSENT AGENDA

Following review, Lisa Martin motioned, and Thomas Casey seconded to approve the Consent Agenda as presented.

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Vote: The motion unanimously passed 8/0/0.

PUBLIC COMMUNICATIONS

- Mr. Morgan said Ms. Eagan and Ms. Lyden would speak during Public Comment. Angela Lyden of Ashby said she had concerns with the proposed changes at AES. Jesse Eagan of Ashby discussed her problems with the proposed changes and the large classroom sizes proposed at AES.

REPORTS/INFORMATION ITEMS

1. Chairperson’s Report – Craig Hansen
   - Mr. Hansen congratulated North Middlesex’s Class of 2021 on their graduation and accomplishments. In addition, he thanked North Middlesex’s dedicated team of teachers, staff, and administrators, as well as students, parents, and caregivers, for making this challenging year as successful as it was.

2. Superintendent’s Report – Brad Morgan
   - Superintendent Morgan said there would be a full return to school, and there was no mask mandate for the fall. Mr. Morgan said he expected remote learning options to be minimal next school year.
   - Mr. Morgan said the District had begun exploring the use of ESSER funds. The District’s top priority was to hire interventionists at each level. These positions would allow students to be pulled out of their classrooms for “targeted” intervention to assist with any gaps students may have due to the educational model during COVID-19.

NEW BUSINESS/GENERAL DISCUSSION – VOTES MAY BE TAKEN

1. SEPAC Update – J. Judge
   - Mr. Judge introduced Richele Bohm of SEPAC. Ms. Bohm provided an overview of SEPAC, their fundraising efforts, and presentations and services held during their monthly meetings.

2. FY21 Budget Transfer
   - Nancy Haines provided an overview of the budget transfer.
Randee Rusch moved, and David Carney seconded that the School Committee approve the FY21-2 Budget Transfer: $33,529 to be ADDED to Administration, $300,000 to be ADDED to the Transfer for Crosswalk Upgrades-Capital Project. $58,528 to be transferred FROM Operations & Maintenance and $275,000 FROM Insurance & Retirement programs for a total transfer of $333,528.00.

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Vote: The motion unanimously passed 8/0/0.

3. Prepaying Special Education Tuitions – N. Haines

Nancy Haines provided an overview and asked that the Committee authorize the prepayment of some Special Education tuitions costs, which would free up monies in the FY22 Special Education budget should Special Education tuition and transportation costs increase due to students moving into the District over the summer months or students requiring outside placement.

David Carney moved, and Thomas Casey seconded that the School Committee approve the prepayment of FY2022 Special Education tuition expenses for the first three months of FY22 per MGL Chapter 71, Section 71D and MGL Chapter 40, Section 4E not to exceed $500,000.

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Vote: The motion unanimously passed 8/0/0.

4. BAN Renewal – N. Haines

Following discussion, David Carney moved, and Thomas Casey seconded the North Middlesex Regional School Committee vote to approve the sale of the $203,868 0.45 percent General Obligation Bond Anticipation Notes (the “Notes”) of the District dated July 16, 2021, and payable July 15, 2022, to UniBank For Savings at par and accrued interest, if any.
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Vote: The motion unanimously passed 8/0/0.

5. Class Size – B. Morgan
   Superintendent Morgan provided an overview to the Committee and said the District’s class sizes were projecting low to mid 20’s at the elementary level. However, there had been some recent concerns around grade 2 at AES, which could potentially reach 28.

   As the budget is again tight and issues of low-class sizes (below 20) have come up across the District, and class sizes were questioned at town FinCom meetings. We had decided to make reductions, at least for now.

   Mr. Morgan said the reality was that class size could fluctuate a great deal. In addition, we still did not have definitive answers around who will return from homeschooling, which more than doubled last year. Finally, while the state was letting up on many of its educational mandates around COVID-19, the new delta variant is causing concern as it mainly impacts younger people. Those under 12 will not have access to the vaccine (as of now) in time for the start of the school year - so many parents may opt-out.

   NMRSD also has a relatively high foster population, which causes school populations to fluctuate over the summer.

   Interventionists, if approved, will pull students from classes throughout the day for targeted work. This should help provide relief. There is also the consideration to hire a paraprofessional for that class.

   It is essential to point out that school choice is not a viable option unless it is to fill classes … for example, if we had a class of 18, adding three school choice slots to make a class of 21 would make sense where the teacher was already budgeted for. However, it is not feasible to increase teachers due to school choice as the District only receives 5K, and the per-pupil expenditures are close to 17K, with the average teacher running 80-90K with benefits.

   Our plan for AES is to begin conversations about how to better balance students in our elementary schools, which could include redistricting, which had been discussed numerous times over the years.

   A discussion ensued about current class sizes, projected class sizes, and the history of class sizes.
6. Governor Baker’s extension bill allowing remote meetings until April 1, 2022 – C. Hansen
Following discussion, Susan Robbins moved, and Randee Rusch seconded the North Middlesex Regional
School Committee vote to meet remotely throughout the summer months and plan to meet in person in the
fall.

Craig Hansen moved, and Susan Robbins seconded to amend the motion to allow the School Committee to
meet remotely throughout the summer months and begin meeting in person in the fall. And all
subcommittees to meet remotely through April 1, 2022.

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**Vote:** The motion unanimously passed 8/0/0.

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**Vote:** The motion unanimously passed 8/0/0.

7. Masks for Summer School – B. Morgan
The Committee discussed the possibility of requiring face coverings for all students and staff attending
summer school classes.

Susan Robbins moved, and Randee Rusch seconded the North Middlesex Regional School Committee vote to
support the Administration’s recommendation that masks be optional for all district summer programs.
Roll Call Vote:

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Vote: The motion unanimously passed 8/0/0.

SUBCOMMITTEE REPORTS – VOTES MAY BE TAKEN
1. Accelerated Repair (L. Martin)
   - None
2. Building Committee (R. Templeton)
   - None
3. Finance (L. Martin)
   - Ms. Martin said the Town of Pepperell approved the Stabilization Fund and the FY22 Budget.
   - Mr. Morgan said the FY22 budget was approved in all three towns, which was a 2.45% increase over the FY21 budget.
   - Mr. Morgan confirmed the Towns of Pepperell and Townsend approved the Stabilization Fund. He noted that the Town of Ashby was expected to vote on the matter this fall.
   - Mr. Hansen thanked Mr. Morgan and Ms. Haines for attending the town meetings and answering all the communities questions on the Stabilization fund.
4. Negotiation & Personnel (T. Casey)
   - None
5. Policy (R. Rusch)
   - None

OTHER BUSINESS NOT REASONABLY ANTICIPATED WITHIN 48 HOURS – VOTES MAY BE TAKEN
1. Livestreaming Committee Meetings
   Susan Robbins moved the School Committee vote to direct the Administration to estimate a cost to start live streaming committee meetings.
   
   Lisa Martin said she would reach out to Pepperell Media to discuss options.

2. OPEB
   A discussion ensued about increasing the OPEB amount.

EXECUTIVE SESSION – VOTES MAY BE TAKEN
Randee Rusch moved, and David Carney seconded that the School Committee meets in executive session pursuant to M.G.L. Chapter 30A, sec. 21(a) for the following purpose:

   - Purpose (2): To conduct strategy sessions in preparation for negotiations with nonunion personnel or
to conduct collective bargaining sessions or contract negotiations with nonunion personnel;

- **Purpose (3):** to discuss strategy with respect to and in preparation for collective bargaining with the North Middlesex Regional School District Teachers, Nurses, Secretarial, Paraprofessional, and Custodial Units/Associations because an open discussion may have a detrimental effect on the bargaining position of the Committee.

- **Purpose (7):** To comply with, or act under the authority of, any general or special law or federal grant-in-aid requirements.

- **Approval of Executive Session Minutes**

The Committee would reconvene in an open session.

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**Vote:** The motion unanimously passed 8/0/0.

At 8:55 p.m., Executive Session began.

At 9:47 p.m., the Committee returned to open session.

*Thomas Casey moved, and David Carney seconded the School Committee vote to approve the Teachers’ contract dated June of 2021.*

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**Vote:** The motion passed 7/0/1.
Thomas Casey moved, and David Carney seconded the School Committee vote to approve the Nurses’ contract dated June of 2021.

**Roll Call Vote:**

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**Vote:** The motion unanimously passed 8/0/0.

Thomas Casey moved, and David Carney seconded the School Committee vote to approve the Secretarial contract dated June of 2021.

**Roll Call Vote:**

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**Vote:** The motion unanimously passed 8/0/0.

Thomas Casey moved, and David Carney seconded the School Committee vote to approve the COVID-19 recognition payment for custodial and non-represented personnel with contracts and employed by the District on June 8, 2021, in the amount of 1% of their FY21 base salary.

**Roll Call Vote:**

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Vote: The motion unanimously passed 8/0/0.

At 10:00 p.m., Lisa Martin moved, and David Carney seconded that the School Committee vote to adjourn.

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Vote: The motion unanimously passed 8/0/0.

Documents Reviewed / Referred To:
- 2021 06-21 School Committee Agenda
- DESE Guidance on Superintendent Evaluation
- MASC FAQs on Superintendent Evaluation
- MASC Superintendent Evaluation Guide
- Superintendent Evaluation for School Committee
- MGL Chapter 40 Section E
- MGL Chapter 71 Section 71D
- 2021 05-17 School Committee ES Minutes
- 2021 06-21 School Committee Attendance Report
- MOA Nurses FY22.25
- MOA Secretaries FY22.25
- Secretaries Schedule Revised

Respectfully submitted,
Robin Eibye, Recording Secretary

APPROVED: July 19, 2021
Memo

To: Brad Morgan, Superintendent
From: Tim McMahon, Principal
Re: Donation to NMRHS
Date: June 11, 2021

I am requesting that the NMRSD School Committee accept a $1500.00 donation to North Middlesex Regional High School from The Blackbaud Giving Fund by its agent, YourCause. The purpose of this donation is to help defray the cost of supplies and materials needed within the science department.

TM/sh
The Blackbaud Giving Fund by its agent, YourCause
63 Fairchild Street
Charleston, SC 29402

PAY EXACTLY One Hundred And 0/100 Dollars

PAY TO THE ORDER OF NORTH MIDDLESEX REGIONAL
19 MAIN ST
TOWNSEND, MA 01469-1356

Check No. 1270179003
BBVA Compass
88-1054/1130
DATE 5/24/2021
AMOUNT $100.00
VOID AFTER 120 DAYS
Grant terms found here: nonprofit.yourcause.com/grantterms

Matthew J. Neal
AUTHORIZED SIGNATURE

---

The Blackbaud Giving Fund by its agent, YourCause
65 Fairchild Street
Charleston, SC 29402

PAY EXACTLY One Thousand Four Hundred And 0/100 Dollars

PAY TO THE ORDER OF NORTH MIDDLESEX REGIONAL
19 MAIN ST
TOWNSEND, MA 01469-1356

Check No. 1270182233
BBVA Compass
88-1054/1130
DATE 6/3/2021
AMOUNT $1,400.00
VOID AFTER 120 DAYS
Grant terms found here: nonprofit.yourcause.com/grantterms

Matthew J. Neal
AUTHORIZED SIGNATURE

---

Robin -
Donations to NMRHS

Signature
6/18/21
Memo

To: Brad Morgan, Superintendent
From: Tim McMahon, Principal
Re: Donation to NMRHS
Date: June 28, 2021

I am requesting that the NMRSD School Committee accept a $150.00 donation to North Middlesex Regional High School from The Blackbaud Giving Fund by its agent, YourCause. The purpose of this donation is to help defray the cost of supplies and materials needed within the science department.

TM/sh
The Blackbaud Giving Fund is pleased to present NORTH MIDDLESEX REGIONAL with the enclosed grant of $150.00 made on behalf of AbbVie Employee Engagement Fund and its donors.

Grant Amount
$150.00

Donor Details
Donor information related to these funds can be accessed securely by going to our Nonprofit Portal: https://nonprofit.yourcause.com.
- View donor details by going to “Giving” then “Payments and Transactions”.
- Donor information is only available on our Nonprofit Portal.

First Time Users, Establish an Account
- Visit NPConncet https://nonprofit.yourcause.com and click on “Sign up”.
- Proceed with creating your account, verifying your email, and selecting your organization.

ACH (Direct Deposit)
YourCause and The Blackbaud Giving Fund encourage you to sign up for ACH through https://nonprofit.yourcause.com.
- Click on “Administration” then “Disbursement Information” to sign up for ACH.
- ACH is our preferred method of payment because it's eco-friendly, secure, and faster.
- ACH can prevent the loss of funds if a check remains uncashed.

Have Questions?
If you have questions or concerns, please contact our Nonprofit Support Team at charity@yourcause.com.

See Next Page For Details
US Grant Terms: Any grant issued by The Blackbaud Giving Fund is subject to the following terms. By accepting any grant from The Blackbaud Giving Fund, you represent to The Blackbaud Giving Fund that (i) your organization is formed under the laws of the U.S. and its territories and is a public charity described in IRC secs. 509(a)(1)-(3), a political subdivision of the United States, a State, a possession of the United States within the meaning of Section 170(c)(1) of the Code of the Internal Revenue Code of 1986 or a private operating foundation described in IRC sec. 4942(j)(3); (ii) this grant will be used exclusively for your organization's exempt purposes; (iii) neither the recommending donor nor any other party will receive goods, services or impermissible benefits (e.g., tuition, memberships, dues, admission to events or goods bought at action, or anything of more than incidental benefit) as a result of the grant; (iv) the grant will not be used for political contributions or campaign activities; and (v) your organization does not devote more than an insubstantial part of its activities to attempting to influence legislation by propaganda or otherwise.

You should not provide a tax receipt for this grant. This gift was made from a donor advised fund account and The Blackbaud Giving Fund has already provided the donor with a tax receipt for this donation.

The Blackbaud Giving Fund is an independent public charity that sponsors a donor advised fund program. Donors make irrevocable charitable contributions to The Blackbaud Giving Fund and have the privilege of recommending grants to qualified public charities.
<table>
<thead>
<tr>
<th></th>
<th>AES</th>
<th>SMS</th>
<th>VBES</th>
<th>HBMS</th>
<th>NMS</th>
<th>NMRHS</th>
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</tbody>
</table>
Good morning,

I’ve made the following corrections/adjustments to the 2021-2022 Program of Studies based on the fact that we’ll still be using a 5x8 schedule next year.

All changes appear in red in the document I’m sharing:

1. Changed: Assistant Principal Kervin to Assistant Principal Tanaka (page 3).

2. Changed: Under Graduation Requirements - 140 credits to graduate (page 6).

3. Changed: Under Promotion, Credits, & Graduating - added 5 credits to each grade level necessary to advance to next grade (meaning, students must earn 35 credits to become sophomores, 70 to become juniors, etc) Page 8

4. Changed: Under Mathematics - AP Calc BC is updated to 7.5 credits, instead 5 credits. (page 19).

5. Changed: Under Science - AP Bio is updated to 7.5 credits instead of 5 credits. (page 27).

6. Changed: Under Science - AP Chem is updated to 7.5 credits instead of 5 credits (Page 27).

Please let me know if you have any additional questions or concerns.

Thanks,

Tim
January 2021

Principal’s Message:

It is with great pleasure that I present the updated Program of Studies for the 2021 - 2022 academic year. The courses you choose will help you to meet the North Middlesex Regional High School graduation requirements and, more importantly, allow you to develop your interests and broaden your academic understanding and skills base. We offer a wide range of courses at NM. I would ask that you think carefully about your choices so that your classes both satisfy your curiosity and help to prepare you for your college and career aspirations. It is important that you leverage every minute of your high school experience to help prepare you for life after NM. That means allowing yourself time to think and reflect, time to enjoy and achieve outside of the classroom, and time to work hard on your academics.

Please be mindful of the role your teachers, parents, and guidance counselors have in this process; they know you well and have the experience and expertise to help guide you. It is important that you get the right balance between pursuing your interests through rigorous classes and by taking advantage of the numerous extra-curricular opportunities that we offer.

The Program of Studies is constantly evolving and the faculty has added new electives to our rich course offerings. Our faculty has played an invaluable role in this work, supported by the guidance department and overseen by Assistant Principal Laurie Smith. I would like to take this opportunity to thank everyone who contributed to this work, whether in a big or a small way, including the many students who have taken the time to talk with me about their experiences with the NM curriculum.

Sincerely,

Timothy McMahon
Timothy McMahon
Principal
Statement of Accreditation
North Middlesex Regional High School was accredited in 2014 by the New England Association of Schools and Colleges, Inc., a non-governmental, nationally recognized organization whose affiliated institutions include schools through collegiate institutions offering post-graduate instruction. Accreditation of an institution by the New England Association indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer group review process. An accredited school or college is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation. Accreditation by the New England Association is not partial but applies to the institution as a whole. As such, it is not a guarantee of the quality of every course or program offered or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Discrimination Statement
It is the policy of the North Middlesex Regional School District not to discriminate against students, parents, employees, or the general public on the basis of race, color, national origin, sex, religion, gender identity, sexual orientation, disability, homelessness, or age in accordance with Title VI of the Civil Rights Act of 1964 (race, color, national origin, sex, religion); Title IX of the Education Amendments of 1972 (sex); Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990 (disability); M.G.L. c. 76, § 5 (race, color, sex, gender identity, religion, national origin, or sexual orientation); the McKinney-Vento Homeless Assistance Act (homelessness); and the Age Discrimination in Employment Act (age[1]).

The Committee's policy of nondiscrimination will extend to students, staff, the general public, and individuals with whom it does business; No person shall be excluded from or discriminated against in admission to a public school of any town or in obtaining the advantages, privileges, and courses of study of such public school on account of race, color, national origin, sex, religion, gender identity, sexual orientation, disability, homelessness, or age. If someone has a complaint or feels that they have been discriminated against because of their race, color, national origin, sex, religion, gender identity, sexual orientation, disability, homelessness, or age, their complaint should be registered with the Title IX compliance officer. Inquiries regarding compliance with these laws may be directed to the Superintendent of Schools, North Middlesex Regional School District (978) 597-8713, or to the Department of Elementary and Secondary Education, 75 Pleasant Street, Malden, Massachusetts 02148 (state laws) or to the United States Department of Education, Region 1, Office of Civil Rights, John W. McCormack Post Office and Courthouse, Room 222, Post Office Square, Boston, Massachusetts 02109 (federal laws).

2021-2022 Program of Studies
The administration of the North Middlesex Regional High School reserves the right to alter this Program of Studies as needed with notification and approval of the Superintendent of Schools and School Committee. Selection of a course during registration does not guarantee placement in a class.
North Middlesex Regional High School
19 Main Street
Townsend, MA 01469
Ph: 978-597-8721
Fax: 978-597-3180

NORTH MIDDLESEX REGIONAL HIGH SCHOOL
Administration

Principal
Timothy McMahon

Assistant Principal
Laurie Smith

Assistant Principal
Shigehito Tanaka

Athletic Director
Cameron Fisk
# Table of Contents

**PRINCIPAL’S MESSAGE**  
-------------------------------------------------------------------------------------------------------------------------- 1

  Values & Beliefs About Learning  
  -------------------------------------------------------------------------------------------------------------------------------------------------------------------- 5

**COURSE SELECTION GUIDELINES**  

  Graduation Requirements  
  -------------------------------------------------------------------------------------------------------------------------------------------------------------------- 6

  Choosing Your Courses  
  -------------------------------------------------------------------------------------------------------------------------------------------------------------------- 6

  Promotions, Credits, and Grading  
  -------------------------------------------------------------------------------------------------------------------------------------------------------------------- 8

**COURSE DESCRIPTIONS**
Business

Engineering & Technology

English/Language Arts

Mathematics

Performing Arts

Physical Education

Science

Social Studies

Special Education

Specialized Programming

Visual Arts

World Languages

COURSE INDEX

Page 44
At North Middlesex Regional High School, our students:

**GROW** into respectful and responsible citizens,

**PURSUE** goals as they challenge themselves to learn and succeed,

**ACHIEVE** excellence as they progress toward their personal and academic potential.

**VALUES & BELIEFS ABOUT LEARNING**

**WE VALUE GROWTH.**

We believe all members of our educational community GROW when we:

- Think critically and creatively
- Try new things and respond to change
- Collaborate with others to better draw on the strengths, differences, and perspectives of all
- Reflect regularly on our thinking and behavior to learn from our mistakes and celebrate accomplishments

**WE VALUE THE PURSUIT OF KNOWLEDGE & EXCELLENCE.**

We believe:

- Learning is a life-long pursuit
- All students can learn and attain excellence
- There are many different ways of learning and definitions of excellence
- Students need time to develop and take ownership of their learning
- Learning is an opportunity for students to pursue their interests and goals

**WE VALUE ACHIEVEMENT.**

We believe:

- All students will rise to high expectations
- There are many ways students can achieve and succeed
- We will maintain our tradition of academic excellence and service to others as we embrace innovative ideas and face new challenges
Students will be required to earn a minimum of 140 credits to graduate. Students are required to register for a minimum of seven (8) courses per year.

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>NMRHS Graduation Requirements</th>
<th>Required By MA State Colleges &amp; Universities</th>
<th>Recommended By Most 4-Year Colleges</th>
<th>Recommended By Highly Selective Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Language Arts</td>
<td>4 full credit courses</td>
<td>4 courses</td>
<td>4 courses</td>
<td>4 courses</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4 full credit courses</td>
<td>4 courses</td>
<td>4 courses</td>
<td>4 courses</td>
</tr>
<tr>
<td>Social Studies*</td>
<td>3 full credit courses</td>
<td>3 courses</td>
<td>3 courses</td>
<td>4 courses Including US History, World History, &amp; Economics</td>
</tr>
<tr>
<td></td>
<td>*Students must pass the civic action project in US History 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>3 full credit Lab courses</td>
<td>3 lab courses</td>
<td>3 lab courses including Biology, Chemistry, &amp; Physics</td>
<td>4 lab courses including Biology, Chemistry, &amp; Physics</td>
</tr>
<tr>
<td>World Language</td>
<td>2 high school credit courses in the same language</td>
<td>2 high school courses in the same language</td>
<td>2-3 high school courses in the same language</td>
<td>3-4 high school courses in the same language</td>
</tr>
<tr>
<td>Physical Education</td>
<td>4 half credit courses</td>
<td>Varies by college/university</td>
<td>Varies by college/university</td>
<td>Varies by college/university</td>
</tr>
<tr>
<td>Arts (music, visual, drama)</td>
<td>1 half credit course</td>
<td>Varies by college/university</td>
<td>Varies by college/university</td>
<td>Varies by college/university</td>
</tr>
<tr>
<td>Technology</td>
<td>Included as an elective</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Electives</td>
<td>Any combination of offered electives such as business education, technology, arts, etc. [27.5 credits]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Choosing Your Courses

North Middlesex Regional High School’s courses are designed to challenge the unique talents of all students. This course catalog has been prepared to guide students through the planning of their high school experience. The course selection process is ongoing and should involve students, parents, teachers, and school counselors.

**Step 1: Consult Your School Counselor and Teachers**

The North Middlesex school counselors can provide a broad overview of the entire curriculum and sound advice about planning a suitable program that will prepare students as they form their post-secondary plans. Classroom teachers have an in-depth knowledge of the content of the various courses and a strong sense of the academic expectations of each course. Knowing an individual’s particular learning style, a teacher can make a valid recommendation for proper placement.

**Step 2: Consider the Challenge**

Selecting courses should be a thoughtful process with the ultimate goal of creating an appropriately balanced educational experience. It is important to find the best course fit for each student’s strengths and challenges. North Middlesex allows students to choose from Advanced Placement, Accelerated, and College Preparatory courses. Every course level provides challenging options for students over their four years of high school that are geared toward college and career preparation. Most electives are at the college preparatory level.
Advanced Placement

Advanced Placement (AP®) courses have the greatest degree of difficulty. These courses are taught in compliance with an AP® curriculum approved by the College Board. All AP® courses require extensive summer work, assessed at the beginning of the school year. AP® courses provide a student with an opportunity to experience college-level work while still in high school. It is expected that students who enroll in AP® courses also register for the national AP® exam. For more information, please refer to each department’s course offerings.

Accelerated

Curriculum topics are identical for accelerated and college preparatory courses; however, accelerated courses are delivered at a faster pace and are intended to provide the student with deeper knowledge of the topic than standard college preparatory courses. Students, who participate in accelerated courses, are expected to complete work independently requiring higher-order thinking, comprehend complex texts, and regularly reflect on their learning.

College Preparatory (College Prep)

College Preparatory courses teach students the essential skills and important information that they will need to be ready for college. In college preparatory courses, assessments and class activities teach students to apply 21st Century Skills to new knowledge to solve real-world problems. Most electives are at the college preparatory level.

Step 3: Factor in College Admissions Requirements

When selecting courses, bear in mind that the decisions made earlier in high school will be meaningful when admissions officers consider college applications. In addition to coursework, colleges and universities weigh some or many of the following factors in their admission requirements.

- **Academic Record**: Grade Point Average (GPA), class rank, consistency, improvement, and difficulty of courses.
- **Variety in Coursework**: Broad and diversified transcript.
- **Test Scores**: Results of standardized tests such as the SAT or ACT.
- **Extracurricular Activities**: Most colleges require an “Activities Resume.” Students are encouraged to participate in a variety of extracurricular offerings from music, sports, or community service.
- **Letters of Recommendation**: The letters of recommendation serve to paint a broader, more personal picture of the student. These letters provide information of a personal nature that is not reflected on a student’s transcript.
- **Honors and Awards**: Students who have received recognition for skills or talents should include these accolades on their Activities Resume or on college applications.
- **Essays**: Most applications for colleges will have an essay or personal statement requirement. The essay provides a personal voice and a snapshot of the student’s writing ability.
- **Interviews**: While not always offered, interviews are another way to gain insight into the applicant.

Step 4: Go Online To NAVIANCE

Naviance is NM’s college and career readiness software program that helps students connect their high school experience to post-high school goals. If a student is unsure of which classes to select, he or she should consider going onto the district website, select the “Links” tab and find Naviance. Once on the software, students can find and take a series of career assessments. After completion of this step, the software will identify several career options that best fit with a student’s personality and learning style. By investigating college majors and careers, students will have more knowledge to help them choose their courses at the high school level, as well as, help them in planning their future college pursuits.

Step 5: Make Your Choices

The course selection process is one that should be a cooperative venture between the student, parent, teacher, and school counselor. Students should choose their classes carefully and realistically since changes to the schedule are made for academic reasons only. Any change to a student’s course selection sheet or schedule must be approved by his or her parents/guardians, the teachers, and the school counselor. The reason for the change must be justified, and the student must realize that change requests are not automatically granted.

When students feel the circumstances are extenuating enough to require a course change, the student must follow the sequence below:
1. Meet with the class teacher to resolve concern(s).
2. If a resolution is not met with the first meeting, then a meeting with guidance, teacher, parents, administration, and the student will take place.
3. If the course can be changed (and it is advisable to do so), the rest of the form may be filled out.
4. The student must present parent/guardian, instructor, counselor, and administration a signed schedule change form to the instructor, return textbook(s) and/or course materials, and have the instructor provide written verification this has happened.
5. The student must present the completed and signed change of schedule form to the counselor.
6. Only after the above procedure has been followed will the request be processed.

Promotion, Credits, and Grading

PROMOTION REQUIREMENTS
Students must earn the following minimum number of credits for promotion to the next grade level:

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<thead>
<tr>
<th>Grade</th>
<th>Credits</th>
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<tr>
<td>Grade 9</td>
<td>35 credits</td>
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<td>Grade 10</td>
<td>70 credits</td>
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<tr>
<td>Grade 11</td>
<td>105 credits</td>
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<tr>
<td>Grade 12</td>
<td>140 credits*</td>
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</tbody>
</table>

* Minimum of 140 Credits required for graduation.

GRADING SYSTEM
Transcripts and report cards reflect letter grades. The numerical equivalents are:

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<tr>
<th>Grade</th>
<th>Numerical Value</th>
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<tbody>
<tr>
<td>A+</td>
<td>100-97</td>
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<tr>
<td>A</td>
<td>96-93</td>
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<tr>
<td>A-</td>
<td>92-90</td>
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<tr>
<td>B+</td>
<td>89-87</td>
</tr>
<tr>
<td>B</td>
<td>86-83</td>
</tr>
<tr>
<td>B-</td>
<td>82-80</td>
</tr>
<tr>
<td>C+</td>
<td>79-77</td>
</tr>
<tr>
<td>C</td>
<td>76-73</td>
</tr>
<tr>
<td>C-</td>
<td>72-70</td>
</tr>
<tr>
<td>D</td>
<td>69-65</td>
</tr>
<tr>
<td>F</td>
<td>64-0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
</tr>
<tr>
<td>P</td>
<td>Passing</td>
</tr>
</tbody>
</table>

QUALITY POINT AVERAGE (QPA) is a cumulative computation of a student's academic class standing. It is a weighted ranking system in which both the levels and course grades are used to determine the average and class standing. This system is used as a guide for the National Honor Society. Junior class rank is based on six semesters, and senior class rank is based on eight semesters. The QPA is used to determine the class valedictorian and salutatorian. The calculation of the QPA includes only academic courses, that is, courses in Advanced Placement, Accelerated, and College Prep Levels.

The QPA is computed by adding the weighted grade value of the final letter grade for each course and multiplying the sum by the number of credits for each course and then dividing by the total number of credits.

\[ QPA = \frac{\text{SUM OF WEIGHTED GRADES X NUMBER OF CREDITS}}{\text{TOTAL CREDITS}} \]
### WEIGHTED GRADE VALUES

<table>
<thead>
<tr>
<th>Grade</th>
<th>Numerical Equivalent</th>
<th>AP Course</th>
<th>Accelerated Course</th>
<th>College Prep Course</th>
<th>Introductory Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>100-97</td>
<td>5.5</td>
<td>5.0</td>
<td>4.5</td>
<td>4.0</td>
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<td>A</td>
<td>96-93</td>
<td>5.0</td>
<td>4.5</td>
<td>4.0</td>
<td>3.5</td>
</tr>
<tr>
<td>A-</td>
<td>92-90</td>
<td>4.5</td>
<td>4.0</td>
<td>3.5</td>
<td>3.0</td>
</tr>
<tr>
<td>B+</td>
<td>89-87</td>
<td>4.3</td>
<td>3.8</td>
<td>3.3</td>
<td>2.8</td>
</tr>
<tr>
<td>B</td>
<td>86-83</td>
<td>4.0</td>
<td>3.5</td>
<td>3.0</td>
<td>2.5</td>
</tr>
<tr>
<td>B-</td>
<td>82-80</td>
<td>3.7</td>
<td>3.2</td>
<td>2.7</td>
<td>2.2</td>
</tr>
<tr>
<td>C+</td>
<td>79-77</td>
<td>3.4</td>
<td>2.9</td>
<td>2.4</td>
<td>1.9</td>
</tr>
<tr>
<td>C</td>
<td>76-73</td>
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<td>2.5</td>
<td>2.0</td>
<td>1.5</td>
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<tr>
<td>C-</td>
<td>72-70</td>
<td>2.7</td>
<td>2.2</td>
<td>1.7</td>
<td>1.2</td>
</tr>
<tr>
<td>D</td>
<td>69-65</td>
<td>2.4</td>
<td>1.9</td>
<td>1.4</td>
<td>0.9</td>
</tr>
<tr>
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<td>0</td>
<td>0</td>
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<tr>
<td>I</td>
<td>Incomplete</td>
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<td>0</td>
<td>0</td>
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</tr>
</tbody>
</table>

### HONOR ROLL

The Honor Roll program exists to recognize academic achievement. Honor Roll eligibility is as follows:

**HIGH HONORS:** A- or above in all subjects

**HONORS:** B- or above in all subjects

Pass/Fail (P/F) will not count towards the determination of honor roll.
Business classes provide students with the opportunity to integrate academic and career-based instruction, preparing them for success in life and education. North Middlesex currently offers accounting, business law, the foundations of business, and the foundations of marketing.

Students participating in these elective courses will develop essential skills for the 21st-century marketplace. Students will acquire in-depth understanding of accounting and finance, economics, entrepreneurship, law, marketing, and corporate social responsibility. They will utilize communication and teamwork to analyze, research, and solve real-world dilemmas. Classes will simulate a professional setting.

**BUSINESS**

**ACCOUNTING**
5 Credit Full Year Course
Accounting is the language of business and an integral aspect of all business activities. Mastery of fundamental accounting concepts, skills, and competencies is essential to making informed business decisions. Regardless of students’ chosen course of study or career path, accounting prepares them to be educated business professionals and informed consumers. This accounting course provides a foundation in the art of communicating financial information. This course addresses the needs of students who want to gain a strong working knowledge of basic accounting theory and procedures. Accounting principles will be explored, so that the student will learn how to keep accurate records for service businesses organized as a sole proprietorship and merchandising businesses organized as a corporation. Students will become proficient in using journals, ledgers, and in preparing primary financial statements.

**ADVANCED ACCOUNTING**
2.5 Credit Semester Course
Accounting is the language of business and an integral aspect of all business activities. Mastery of fundamental accounting concepts, skills, and competencies is essential to making informed business decisions. Regardless of students’ chosen course of study or career path, accounting prepares them to be educated business professionals and informed consumers. This is the capstone of a series of accounting courses for students who intend to attend a business school and pursue a career in business and/or accounting. This course emphasizes the ability to work independently as one would in business. Students will venture past the pre-designed problems and into an area of accounting where they will develop their own accounting system and methodology.

**ADVANCED BUSINESS LAW**
2.5 Credit Semester Course
Business Law addresses statutes and regulations affecting businesses, families, and individuals in their related roles. A knowledge of business law is useful for all students, because all students eventually assume roles as citizens, workers, and consumers in their communities and in society at-large. Businessess operate in an increasingly global environment, where the laws of different governments and judicial systems might conflict. Thus, business students must include in their academic preparation a basic knowledge of the legal system and how business law impacts commerce. This is the capstone of a series of business law courses for students who intend to attend a business school and pursue a career in business and/or law. This course explores the United States legal system with a focus on agency and employment law, the lifecycle of a business, government regulations, and property. Students are expected to study case law and actively participate in situational analysis.

**BUSINESS MANAGEMENT**
5 Credit Full Year Course
This course is an introduction to basic concepts of economics, ethics and social responsibility, organizational behavior, marketing, and accounting. Development of skills necessary for the foundations of entrepreneurial thought, identification of key business opportunities, and formulation of appropriate well thought out business decisions are addressed. Furthermore, by completing a series of integrated hands-on projects that combine the concepts of entrepreneurship and computer skills, this course will guide students through the process of creating a business plan for a business that they choose to start and operate. Throughout this course, students will be challenged to use creativity, entrepreneurial thought, writing, and decision-making skills that will yield a professional business plan and marketing materials. Finally, this course will provide students with an understanding of how and why businesses choose to expand their operations into other countries.
BUSINESS LAW

2.5 Credit Semester Course

Elective Course #: BU635

Recommended for grades 11-12

Business Law addresses statutes and regulations affecting businesses, families, and individuals in their related roles. A knowledge of business law is useful for all students, because all students eventually assume roles as citizens, workers, and consumers in their communities and in society at-large. Businesses operate in an increasingly global environment, where the laws of different governments and judicial systems might conflict. Thus, business students must include in their academic preparation a basic knowledge of the legal system and how business law impacts commerce. This course explores the United States legal system with a focus on the legal environment, torts, and contract law as relevant to both business and personal agreements. Students are expected to study case law and actively participate in situational analysis.

MARKETING

2.5 Credit Semester Course

Elective Course #: BU633

Recommended for grades 11-12

Marketing focuses on what businesses do to influence consumers’ buying decisions as they relate to the four principles of marketing: product, price, place, and promotion. Other topics include strategic marketing, market research, and branding. Students are expected to produce complete and detailed marketing plans. Class time is devoted to the analysis of both successful and unsuccessful marketing campaigns, as well as the impact of technology on the marketplace and principles of marketing. Students are expected to produce complete and detailed marketing plans.
The engineering concentration is designed to prepare students for a career in engineering. Through a multidisciplinary approach, students will examine the dynamics of life on Mars. Students will consider the implications of technology and human interaction, the logistics of space travel, and colonization and establishment of a sustainable culture on Mars. Enrollment in a requisite list of classes will allow students to access the curriculum that will help them design solutions to the challenges facing future generations as they seek to expand our footprint in the solar system.

**What is the Engineering Concentration?**
Engineering Concentration is a three-year program culminating in a capstone project examining one of the challenges we face as our society considers colonization of Mars. This project will include a model, a research paper, oral defense of the topic, and an electronic component of the presentation (e.g. website, film).

**What are the benchmarks for the program?**
There will be a ‘benchmark’ project related to the question posed for each course. For example, in Chemistry the benchmark question will be, “How will fuel be produced and stored on Mars?” Students will create a product brief at the completion of each required course. This product brief will address the Mars related question for that course and will include a written portion and a visual component, such as 3D rendering or a photograph/picture. Detailed information on the project brief will be discussed with students in each class.

**What classes do students have to pass to meet the requirement of the program?**
Below is a list of classes that students will need to pass to meet the program requirements.

**Technology and Engineering requirements**
Minimum of fifteen (15) credits in Technology/Engineering classes to qualify for the Capstone class

**Capstone requirement**
Engineering Capstone

**Potential topics of investigation for the Senior Capstone:** The following list is not comprehensive. Rather, it is designed to demonstrate the breadth of the capstone. Capstone topics can address:
- Medical issues on Mars
- Hierarchy of a new society
- Ways to sustain life by developing a sustainable food and water supply
- Communication
- Transportation
- Protection of equipment from weather, environment
- Physiological concerns
- Post travel: How do we acclimate once we arrive?
- How do we deal with the limited amount of space on the vehicles bringing us there? (physics, social studies)
- How to address social issues as they arise in the second and third generations?
ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES

AP® Course #: SE750
5 Credit Full Year Course
Recommended for grades 10-12

Advanced Placement Courses provide an opportunity for students to experience a college course while still in high school. AP courses follow a syllabus that has been approved by the College Board, and teachers must receive specialized training to teach the courses. Although it is not required, it is expected that students who take AP courses will also register for the national AP exam at their own expense. This is a Project Lead the Way (PLTW)* course that opens doors in any career in computer science. Students create apps for mobile devices, automate tasks in a variety of languages, find patterns in data, and interpret simulations. Students collaborate to create and present solutions that can improve people’s lives. How will computing and connectivity transform your world?

This course aims to generate excitement about the field of computing and to introduce computational tools that foster creativity. Students practice problem solving with structured activities and progress to open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills.

This course is designed to cover all learning objectives in the College Board’s AP Computer Science Principles (CSP) framework and to prepare students to do well on the AP assessment. In specific CSP projects and problems, students create artifacts and associated writing for the AP Computer Science Principles Performance Tasks that is submitted to the College Board.

CADD

COURSE #: SE726
5 Credit Full Year Course
COMPUTER-AIDED DRAFTING AND DESIGN) This course offers students the opportunity to explore the computer-aided drafting industry with emphasis placed on providing realistic mechanical drafting and design problems. This course will require students to solve problems through the creation of computer-generated drawings using technical drawing skills and computer-aided drafting software including Inventor. Drawings will be completed to scale and will include 2D and 3D modeling drawings. This course is recommended for students interested in pursuing careers in engineering and computer-aided drafting. Competence in algebra, fractions, and drafting is essential.

CIVIL ENGINEERING AND ARCHITECTURE

Elective Course #: SE724
5 Credit Full Year Course
Recommended for grades 10-12

Civil Engineering and Architecture is a specialized course in the Project Lead the Way (PLTW)* engineering program. In this class, students are introduced to important aspects of building and site design and development. Students will use math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3D architectural design software (Autodesk Revit).

Students will experience both individual and group projects and problems as they learn engineering design and development tools such as project management and peer review. Students will develop skills in engineering calculations, technical representation and documentation of design solutions, and use of 3D architectural design software to represent and communicate solutions.

COMPUTER SCIENCE

College Prep Course #: SE752
5 Credit Full Year Course
Recommended for grade 9

This is a Project Lead the Way (PLTW)* computer science essentials course which introduces students to coding fundamentals through an approachable, block-based programming language where they will have early success in creating usable apps. As students sharpen their computational thinking skills, they will transition to programming environments that reinforce coding fundamentals by displaying block programming and text-based programming side-by-side. Students will learn the power of text-based programming as they are introduced to the Python® programming language. Finally, students will learn to program a self-driving vehicle that can act autonomously.

The course engages students in computational thinking practices and collaboration strategies, as well as industry standard tools authentic to computer science professional work. Students will learn about professional opportunities in computer science and how computing can be an integral part of all careers today.
CYBERSECURITY
5 Credit Full Year Course
Cybersecurity is a Project Lead the Way (PLTW)* Computer Science course that introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. Nationally, computational resources are vulnerable and frequently attacked; in Cybersecurity, students solve problems by understanding and closing these vulnerabilities. This course raises students’ knowledge of and commitment to ethical computing behavior. It also aims to develop students’ skills as consumers, friends, citizens, and employees who can effectively contribute to communities with a dependable cyber-infrastructure that moves and processes information safely.

DRAFTING TECHNOLOGY AND DESIGN
2.5 Credit Semester Course
This course offers students the opportunity to explore a variety of drafting related careers. It provides students with knowledge and skills in drafting techniques, technical sketching, computer-aided drafting, dimensioning, geometric construction, orthographic projection, pictorials, architecture, engineering, and designing to scale. Projects will be given in order of complexity exposing students to a variety of drafting experiences. This course is recommended for students interested in pursuing careers in engineering, architecture, building construction industry, commercial and interior design, computer-aided drafting, and other occupations requiring drafting experience. Competence and aptitude for fractions and algebra are necessary for success. The major assessments for this include hand and CAD drawings, as well as individual and small group projects. This course can be used to fulfill the Fine Arts requirement.

ELECTRONIC APPLICATIONS
2.5 Credit Semester Course
This course is a true beginner’s dive into discovering basic electronics. The presented material covers Ohm’s Law and electronic component operations through electronic circuit design used in operating an Arduino microcontroller. Students will learn how to build and control devices such as a keypad operated security system and a solar tracking platform. This course is recommended for anyone curious about how electronic devices are developed.

ENGINEERING CAPSTONE
2.5 Credit Semester Course
Students fulfilling the Engineering Concentration prescribed course of study will participate in this thesis course to demonstrate mastery, by resolving an approved engineering challenge of their choosing. The final resolution will be presented to a panel for evaluation. The presentation will include a research paper, oral presentation and defense, and a physical model artifact of their solution. Students will meet in a formal class/lab setting within the STEM area, in order to have full access to tools, technology, and resources needed to successfully complete their thesis work.

ENGINEERING CONCEPTS
5 Credit Full Year Course
Engineering Concepts is designed to introduce students to engineering concepts that are applicable across multiple disciplines. Students will build technical skills through the use of engineering tools geographic information systems (GIS), 3-D modeling software and building prototypes. Students will learn and apply the engineering design process to develop mechanical, electronic, process and logistical solutions to relevant problems across a variety of industry sectors, including public health care, public service, product development, and manufacturing.

ENGINEERING DESIGN
5 Credit Full Year Course
Engineering Design is a foundation course in the Project Lead the Way (PLTW)* engineering program. Using an activity-project-problem-based method, students will progress through structured activities and problem solving that include the development of planning, documentation, communication, and other professional skills.

Students will experience both individual and group projects and problems as they learn engineering design and development tools such as project management and peer review. Skills learned include CAD and 3D modeling software (Autodesk Inventor) for
documentation and communication of ideas, statistical analysis, mathematical modeling, as well as, ethical issues related to the engineering field.

**PRINCIPLES OF ENGINEERING**

5 Credit Full Year Course

Lab Course

Principles of Engineering is a specialized course in the Project Lead the Way (PLTW) engineering program. This course exposes students to some of the major concepts that they will encounter in a postsecondary engineering course of study. Student will solve rigorous and relevant design problems within a collaborative learning environment. Units of the course include Energy and Power, Materials and Structures, Control Structures, and Statistics and Kinematics.

**ROBOTICS**

2.5 Credit Semester Course

Since the first industrial robot was installed at a U.S. automotive plant in 1961, robotics technology has become an important factor in most types of manufacturing. In this multi-year course, students will begin by studying basic electronics, as well as the fundamental principles, systems, programming and history of robotics. Students will further develop their programming, mechanical building, critical thinking, and problem-solving skills by applying them to more complex robotics applications with the use of sensors in additional classes. This is a project-based experience where students will build and control robotic devices. Students will use computers to create programs to control robot “arms” and vehicles. Major assessments for this course includes traditional quizzes as well as group project work including building and programming various robots.

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* Project Lead the Way (PLTW) is a nonprofit organization that provides transformative learning experiences for K-12 students and teachers across the U.S. through pathways in computer science and engineering. Students learn problem-solving strategies, critical and creative thinking, and how to communicate and collaborate.
English

The English department maintains a rigorous, rich, and diverse literacy program seeking to promote and enhance the development of reading, writing, speaking, and listening. Students at all grade levels will read traditional and contemporary works from world literature as they explore thematic issues, engage in critical analysis, and practice formal writing skills.

College prep and accelerated courses provide identical college-ready content. However, accelerated courses expect more depth of analysis and critical thinking at a faster pace with more extensive reading outside of school. Juniors and seniors have the additional offerings of Advanced Placement® courses that provide a college-level curriculum and culminate in AP exams. Electives are available at all grade levels for students who wish to continue exploring different forms of literacy.

ENGLISH LANGUAGE ARTS 9
5 Credit Full Year Course
This course focuses on developing the skills of close reading, analysis, argument, and research-based writing. Units include the classical epic, introduction to argument, perspectives on society, introduction to research, Shakespearian drama, and literature as a mirror for society. Cornerstone texts include The Odyssey, Romeo and Juliet, Animal Farm, and Night. Additional novels, short stories, and essays support the core skills. Students will demonstrate their knowledge through formal and informal writing, research, collaborative work, and independent projects.

ENGLISH LANGUAGE ARTS 10
5 Credit Full Year Course
The tenth grade English curriculum celebrates a multicultural exploration of literature and incorporates the concepts of discrimination, identity, non-conformity, censorship, tragedy, and loss. Units incorporate literary genres including novels, short stories, fiction and non-fiction essays, poetry, and drama. Modern writers and traditional canonical authors are explored. In writing, students use the process approach to strengthening thesis development, textual support, focus, clarity, organization, style, and the conventions of Standard English. Reading selections include but are not limited to the following: Macbeth, Julius Caesar and/or Taming of the Shrew, Oedipus and/or Antigone, To Kill a Mockingbird, The Chocolate War, Death Watch, Fahrenheit 451, Lizzy Bright and the Buckminster Boy, Ethan Frome, Hawthorne’s Short Stories (Rappaccini’s Daughter, The Birthmark), The Scarlett Letter, Of Mice and Men, Grapes of Wrath, The Catcher in the Rye, and The Good Earth.

ENGLISH LANGUAGE ARTS 11
5 Credit Full Year Course
This course develops students’ understanding of what makes a work distinctively American. Students engage in critical analysis of fiction, nonfiction, drama, and poetry as they strengthen their critical thinking through collaborative discussion, reflective writing, formal essay writing, and individual and group presentations. Students develop their ability to communicate for diverse purposes and audiences. Thematic units include the personal journey and individual identity, the American dream, inequality, war, and the power of voice. Cornerstone texts include The Great Gatsby, The Things They Carried, American Romanticism, and contemporary American literature. Additional novels, short stories, and essays support the core skills. Major assessments include argument essay, persuasive speech, group and individual presentations, and analytical and reflective writing.

ENGLISH LANGUAGE ARTS 12
5 Credit Full Year Course
Upon entering the twelfth grade, students will read and discuss European literary classics across the major genres. Students will focus on European literature from the Middle Ages to the present: from Chaucer’s Canterbury Tales to Kafka’s Metamorphosis. Units are arranged thematically; students will consider prominent themes for each time period, and students will see how earlier works influence later works and how forms and ideas have evolved. Writing assignments include essays and research papers. By the end of twelfth grade, students will have become familiar with some of the major works and ideas of European literature, honed their skills of literary analysis and effectively write a research paper.
ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION

5 Credit Full Year Course

Advanced Placement Courses provide an opportunity for students to experience a college course while still in high school. AP courses follow a syllabus that has been approved by the College Board, and teachers must receive specialized training to teach the courses. Although it is not required, it is expected that students who take AP courses will also register for the national AP exam at their own expense. AP English Language and Composition is intended to be comparable to a college composition course. This intensive writing course requires students to analyze and critique all facets of rhetorical techniques found in non-fiction, fiction, and image-based texts. Students will learn how to write nuanced synthesis essays and persuasive arguments applying the elements of rhetoric. Students will engage in all steps of the writing process and critique their work as well as the work of their peers. Major assessments include persuasive speeches and essays, analytical and reflective writing, timed writing, oral presentations, and research and synthesis projects. This course meets the Grade 11 English requirement when taken as a junior.

ADVANCED PLACEMENT LITERATURE AND COMPOSITION

5 Credit Full Year Course

Advanced Placement Courses provide an opportunity for students to experience a college course while still in high school. AP courses follow a syllabus that has been approved by the College Board, and teachers must receive specialized training to teach the courses. Although it is not required, it is expected that students who take AP courses will also register for the national AP exam at their own expense. In this course, students will participate in a thematic and stylistic study of British literature of the sixteenth through the twenty-first centuries incorporating philosophical, political, and literary perspectives. The writing assignments require critical analysis of texts as well as the incorporation of sophisticated vocabulary and sentence structure. Classes involve seminar discussions requiring daily preparation, the ability to infer theories and draw conclusions, and higher level abstract thinking. Extensive outside reading, homework, and preparation are required. This course meets the Grade 12 English requirement when taken as a senior.

ENGLISH ELECTIVES

AMERICAN CINEMA

2.5 Credit Semester Course

This course explores American Cinema from the early 1900s to present day. Students will examine the elemental power of film as a literary genre, drawing conclusions about differences in plot, character, setting, theme, and tone. Students will study the four major areas of film: Editing, Sound, Camera-Work, and Mise-en-Scène. Students will discover how the major areas of film create and enhance meaning in the work. Critical viewing, thinking, and reading are integral elements of the course. Dramatic films, documentaries, and social commentaries will be explored as well. The featured films that will be viewed are The Shining, The Green Mile, Slumdog Millionaire, and The Island. All other film viewing will be in the form of short clips.

CREATIVE WRITING

2.5 Credit Semester Course

This elective course is intended for the dedicated writer who currently writes independently and wants to learn to express imagination and creativity in the writing of fiction and poetry. Creative writing is shaped by emotions, imagination, ideas, humor, curiosity, intellect, history, and personal experience. In this course, the student will learn to explore and write from the true self. Students will examine various techniques of pre-writing, writing, editing and revision, various creative genres, and several styles of storytelling. Through the examination of selected literature, students will isolate elements of style that contribute to the writer’s craft. Students should be willing to share their work with classmates and to try new approaches to writing by attempting to write such works as a short story, a fantasy or adventure story, poetry, and/or an original screenplay. The class will culminate in a final writing portfolio in which the students will display their semester work.

FUTURE EDUCATORS

2.5 Credit Semester Course

This elective course is designed for students who are interested in pursuing careers as teachers at any grade level and discipline. Students will learn the basics of lesson planning, educational psychology, creating assessments, classroom management, and educational technology. This project-based course will require students to engage in a wide variety of activities such as creating a teaching portfolio, designing sample lesson plans, and researching important issues in modern American schools.
**GOTHIC LITERATURE**

Elective: EN225

2.5 Credit Semester Course

Recommended for grades 11-12

Students will examine the conventions of gothic fiction from the late 18th century to the present day and explore the historical evolution and appeal of fear, horror, romance, and death in literature. We will read a wide variety of texts, primarily short stories, from diverse groups of authors to explore how gothic horror has evolved over the past three hundred years. These readings will be supplemented with critical texts that outline the psychological, social, and historical foundations of fear and horror in this genre. The course will focus on analytical and comparative reading and writing skills. Primary authors include Edgar Allan Poe, Flannery O'Connor, and Stephen King.

**MODERN READS**

Elective #: EN221

2.5 Credit Semester Course

Recommended for grades 9-10

In this course, modern authors explore issues facing young adults. Students will explore current fiction from 2000-present day. This class focuses on reading a selection of texts by a diverse group of cutting-edge writers that appeal to a wide audience. In addition to reading and discussing the texts, students will engage in hands-on creative projects and various reflective writing assignments, which will help them to understand the text more deeply. The class will frequently hold “book club” style discussions, wherein students will elect and evaluate texts considering themes, style, and form.

**PHILOSOPHY AND ETHICS**

Accelerated Elective #: EN160

2.5 Credit Semester Course

Recommended for grades 11-12

In this course, students will discover and examine the philosophical, moral, and ethical underpinnings of various literary works. A wide variety of literature will be considered to identify basic principles of morality and critical thinking about moral judgments. Themes explored include relationships with others and relationships to the world. Why is there evil in the world and who determines what is right from wrong? Are human actions free or pre-destined? How can the study of classical and modern thinking help one achieve his or her goals in life? These are some of the questions the course attempts to seek answers to through the readings of major philosophical texts and through reflective writing.

**SKILLS FOR SUCCESS**

Elective #: EN199

2.5 Credit Semester Course

Recommended for grades 9-10

Would you like to learn how to ace a job interview? Write a resume? Plan ahead for college or a career preparation program? This practical course will help you discover what you can do now to be successful in the future. Each student will develop a personal vision for the future, practice skills for landing jobs or internships, learn to research colleges and career training programs, and create a step-by-step plan for success in high school and beyond.
Mathematics

The mathematics department is committed to reaching all students with a curriculum that is designed to present mathematics as a fluid, coherent body of knowledge. We offer incoming freshmen the alternative of learning Algebra as a single discipline, or Algebra 1 / Geometry, which blends the two disciplines to experience mathematics as a mathematician would.

Our traditional Algebra 1 course formalizes and extends the mathematics that students learned in the middle grades. This College Prep course is comprised of standards selected from the Massachusetts Frameworks and was written to encompass the scope of content and skills to be addressed throughout grades 9-12. Algebra 1 is followed by Geometry and Algebra 2 in 10th and 11th grades, respectively.

Our Algebra 1 / Geometry courses are offered as College Prep (CP) and Accelerated (Accel). These courses are comprised of standards selected from the high school conceptual categories and were written to encompass the scope of content and skills to be addressed throughout grades 9-12. Students will experience the mathematics of Algebra and Geometry while making connections across traditional domains of Trigonometry, Pre-Calculus and Statistics. Algebra 1 / Geometry (CP or Accel) are traditionally followed by Algebra 2 / Geometry and Pre-Calculus / Trigonometry in grades 10 and 11.

All students must take four years of mathematics. Our courses provide students with the body of knowledge needed to study advanced mathematical courses. Upperclassmen have the option of enrolling in Advanced Placement ® classes in Calculus (AB or BC) as well as AP Probability and Statistics. Additional offerings such as Probability and Statistics, Calculus, and Accounting are available. It is highly recommended that students discuss their senior year mathematics’ goals with their guidance counselors in order to make informed decisions when entering high school.

The use of graphing calculators is an integral part of all mathematics courses in the high school. The Texas Instruments TI-84+ Silver Edition calculator is strongly suggested for our courses. This graphing calculator will continue to benefit our students in college, trade schools, and the military.

MATHEMATICS

ADVANCED PLACEMENT CALCULUS AB
5 Credit Full Year Course
Advanced Placement Courses provide an opportunity for students to experience a college course while still in high school. AP courses follow a syllabus that has been approved by the College Board, and teachers must receive specialized training to teach the courses. Although it is not required, it is expected that students who take AP courses will also register for the national AP exam at their own expense. This course is a college-level course in calculus for grade 11 and 12 students with strong skills in mathematics and an above average achievement level who plan to pursue a course study in mathematics, physics or engineering at a four-year college. It is recommended that students feel confident with previous math classes, and a graphing calculator. This course will cover limits, differential and integral calculus and their applications. A graphing calculator is required (TI-84+ is strongly recommended).

AP® Course #: MA371
Grade 12

ADVANCED PLACEMENT CALCULUS BC
7.5 Credit Full Year Course
Advanced Placement Courses provide an opportunity for students to experience a college course while still in high school. AP courses follow a syllabus that has been approved by the College Board, and teachers must receive specialized training to teach the courses. Although it is not required, it is expected that students who take AP courses will also register for the national AP exam at their own expense. This course is a college-level course in calculus for grade 12 students with strong skills in mathematics and an above average achievement level who plan to pursue a course study in mathematics, physics or engineering at a four-year college. This course will cover limits, differential and integral calculus and their applications. Additionally, students will learn series, sequences, parametric equations and advanced integration techniques. A graphing calculator is required (TI-84+ is strongly recommended).
ADVANCED PLACEMENT PROBABILITY AND STATISTICS

AP® Course #: MA375

5 Credit Full Year Course

Recommended for grade 12

Advanced Placement Courses provide an opportunity for students to experience a college course while still in high school. AP courses follow a syllabus that has been approved by the College Board, and teachers must receive specialized training to teach the courses. Although it is not required, it is expected that students who take AP courses will also register for the national AP exam at their own expense. The course is equivalent to a college-level statistics class. Students who successfully complete this course are prepared to take the AP Statistics exam and have the ability to earn college credit and advanced standing by passing the exam. This course for students in grade 12 is about the collection, display, summarization, analysis, interpretation of data, and concepts from the mathematical disciplines of probability and statistics. The probability portion will include such topics as the basic rules of counting, permutations, combinations, discrete distributions (binomial, Poisson, geometric), and continuous distributions (normal, t-distribution, chi-square, F-distribution). The statistics portion topics consist of sampling, estimation, correlation, regression, confidence intervals, one-sample and two sample hypothesis testing, and (time permitting) non-parametric hypothesis testing. Emphasis is placed on the interpretation and critical evaluation of the numbers and statistics encountered outside of school. A graphing calculator is required (TI-84+ is strongly recommended).

ALGEBRA 1

College Prep Course #: MA100

5 Credit Full Year Course

Grade 9

The fundamental purpose of the Algebra I course is to formalize and extend the Mathematics that students learned in middle school. This course is comprised of the standards found in the 2017 Massachusetts Curriculum Frameworks. It encompasses the scope of content and skills required for college preparation and focuses on mathematical concepts that allow students to apply real-world situations to four critical areas of instruction:

- Extend understanding of numerical manipulation to algebraic manipulation;
- Synthesize deeper understanding of function;
- Deepen and extend understanding of linear relationships;
- Apply linear models to data that exhibit a linear trend.

ALGEBRA 1 / GEOMETRY

College Prep Course #: MA101

Accelerated Course #: MA102

5 Credit Full Year Course

Grade 9

The fundamental purpose of the Algebra I / Geometry course is to formalize and extend the Mathematics that students learned in middle school. This course is comprised of the standards found in the 2017 Massachusetts Curriculum Frameworks. It encompasses the scope of content and skills required for college preparation and focuses on mathematical concepts that allow students to apply real-world situations within five critical areas of instruction:

- Extend understanding of numerical manipulation to algebraic manipulation;
- Synthesize understanding of function;
- Deepen and extend understanding of linear relationships;
- Apply linear models to data that exhibit a linear trend;
- Summarize, represent, interpret, and display data on two categorical and quantitative variables.

ALGEBRA 2

College Prep Course #: MA323

5 Credit Full Year Course

Grade 11

The fundamental purpose of Algebra 2 is comprised of the standards found in the 2017 Massachusetts Curriculum Frameworks. It encompasses the scope of content and skills required for college preparation and focuses on the mathematical concepts that allow students to apply real-world situations within four critical areas of instruction:

- Compare key characteristics of quadratic functions with those of linear and exponential functions;
- Solve equations and inequalities involving linear, exponential, and quadratic expressions;
- Build upon understanding of the functions families and identify appropriate types of functions to model a given situation;
- Expand understanding of functions and graphing to include trigonometric functions.
ALGEBRA 2 / GEOMETRY
5 Credit Full Year Course

The fundamental purpose of the Algebra II / Geometry course is comprised of the standards found in the 2017 Massachusetts Curriculum Frameworks. It encompasses the scope of content and skills required for college preparation and focuses on mathematical concepts that allow students to apply real-world situations to five critical areas of instruction:

- Extend the laws of exponents to rational exponents;
- Compare key characteristics of quadratic functions with those of linear and exponential functions;
- Create and solve equations and inequalities involving linear, exponential, and quadratic expressions;
- Establish criteria for similarity of triangles based on proportional reasoning;
- Establish criteria for similarity of triangles based on proportional reasoning; summarize, represent, interpret, and display data on two categorical and quantitative variables.

CALCULUS
5 Credit Full Year Course

This course is for students with a good aptitude for mathematics, who may pursue a course study in mathematics, computer, science or engineering. This course will cover many of the topics normally studied during the first semester of college calculus including limits, methods of differentiation, applications of derivatives, techniques of integration and applications of the integral. It is recommended that students feel confident with previous math classes, IMM3 concepts, and a graphing calculator.

GEOMETRY
5 Credit Full Year Course

The fundamental purpose of the Geometry course is to formalize and extend the Mathematics that students learned in middle school. This course is comprised of the standards found in the 2017 Massachusetts Curriculum Frameworks. It encompasses the scope of content and skills required for college preparation and focuses on mathematical concepts that allow students to apply real-world situations to six critical areas of instruction:

- Establish criteria for congruence of triangles;
- Establish criteria for similarity of triangles based on dilations and proportional reasoning;
- Informally develop explanations of circumference, area, and volume formulas;
- Apply the Pythagorean Theorem to the coordinate plan;
- Prove basic geometric theorems.

PRE-CALCULUS / TRigonometry
5 Credit Full Year Course

The fundamental purpose of Pre-calculus / Trigonometry is comprised of the standards found in the 2017 Massachusetts Curriculum Frameworks. It combines algebraic, geometric and trigonometric techniques needed to prepare students for the study of calculus. It encompasses the scope of content and skills required for college preparation and focuses on the mathematical concepts that allow students to apply real-world situations to four critical areas of instruction and continue work with:

- Trigonometry: Create trigonometric graphs, prove trigonometric identities, and convert trigonometric forms of complex numbers.
- Functions: Expand student understanding of functions to include logarithmic and trigonometric functions. This includes the role of e, natural and common logarithms, laws of exponents and logarithms, and the solutions of logarithmic and exponential equations.
- Fundamental Theorem of Algebra: Deepen student understanding of the Fundamental Theorem of Algebra by investigating, identifying, graphing and converting between the geometric description and equations of conic sections.
- Calculus: Recognize the fundamental elements of calculus. This includes the introduction of limits with both an algebraic and graphical representation as well as the concept of derivatives.
This course for students in grades 11 and 12 is about the collection, display, summarization, analysis, interpretation of data, and concepts from the mathematic disciplines of probability and statistics. The probability portion will include topics such as the basic rules of counting, permutations, combinations, discrete distributions (binomial, Poisson, geometric), and continuous distributions (normal, t-distribution, chi-square, F-distribution). The statistics portion topics consist of sampling, estimation, correlation, regression, confidence intervals, one-sample and two sample hypothesis testing, and (time permitting) non-parametric hypothesis testing. Emphasis is placed on the interpretation and critical evaluation of the numbers and statistics encountered outside of school.
Performing Arts

The Visual and Performing Arts Department provides a curriculum that enriches academic and cultural learning. At the heart of this curriculum is the creation and performance of various types of art as well as respect for the vast diversity of art across genres and time periods.

Our Performing Arts courses range from beginning instruction in piano and guitar through the advanced study of choral and instrumental literature. Our diverse course offerings are designed to meet the needs, experience levels, and career goals of all students. Students without prior experience can begin study; students who have been in choir or band, or have had previous art courses can continue their study, and students who wish to study the Arts in college can be challenged at the highest levels of rigor.

ACTING: IMPROVISATION & MONOLOGUES
2.5 Credit Semester Course
This course is a basic introduction to acting technique for the stage through exercises that will explore awareness, observation, the senses, and voice. Students will have an opportunity to develop skills that embolden self-confidence, spontaneity, and imagination through a variety of improvisational activities. Students will also explore and hone fundamental acting skills and tools required for working with text. Through monologue analysis, students will build authentic characters and present short works in front of their peers throughout the semester.

CONCERT CHOIR
5 Credit Full Year Course
Concert Choir is for mixed voices (soprano, alto, tenor, and bass) in grades 9-12. In Concert Choir, students will perform music in a variety of styles, genres, and time periods and will gain an understanding of what makes musical periods different from one another. Emphasis will be placed on personal musical development, including the study of the voice as an instrument, music notation, and performing with others. Students are required to perform in three (3) evening concerts at the high school as well as the MICCA Choral Festival. No audition is required, but students must be able to match pitch and sing a simple song.

CHAMBER CHOIR
5 Credit Full Year Course
This is an accelerated course in which the vocal and musical development begun in Concert Choir is continued with a higher level of proficiency. Emphasis is placed on solo singing, vocal technique, and full ensemble performance. Students will have the opportunity to audition for Central District and All-State Choruses. Students will be selected to participate in this ensemble based on musical ability and responsibility toward the preparation and performance of many musical styles. The singers perform many times throughout the year in school and the community. Students are required to perform in three (3) evening concerts at the high school as well as the MICCA Choral Festival. Although not required, private study is highly recommended for students enrolled in this course. Admission to this class is by audition only.

CLASSICAL GUITAR
2.5 Credit Semester Course
This course is designed for the beginning guitar student looking to learn the basics of the instrument. Emphasis will be placed on proper technique, tuning, musical notation, chords, and introductory music theory. The students are expected to develop their performance skill by developing a basic repertoire of solos and duets.

HISTORY OF ROCK and ROLL
2.5 Credit Semester Course
This is a college prep course for students who are interested in the musical genre of Rock and Roll. Students will learn where rock music started, how it evolved, its highs and lows, its outlaws and visionaries, and how it changed social history by combating racism and challenging the establishment with alternate lifestyles and fashions. By the end of the course, students will be able to identify major artists, recognize different styles, and explain the impact of culture, society, and politics on the genre. This course does not require any prior musical knowledge or skill.
JAZZ STUDIES
5 Credit Full Year Course
Jazz Studies is an instrumental ensemble for people who play jazz instruments. Jazz instruments include saxophone, trombone, trumpet drum set, bass, piano, guitar, vibraphone, and voice. Emphasis will be on the presentation and performance of grade III-V jazz literature. Students will hone individual playing techniques, as well as develop ensemble skills throughout the year. The focus will be full ensemble performance, although chamber music, music theory, and music history will also be studied. Students will have the opportunity to audition for the Central District Music Festival. Although it is not required, private study is highly recommended for students in this class. Students are required to perform in all band concerts at the high school.

MUSIC THEORY
2.5 Credit Semester Course
Music Theory introduces students to the analysis of music. Through the examination of classical era music, students will learn how to construct melodic and harmonic structures and explore how composers use those structures. This course requires music reading fluency in at least one clef and is designed for students who have basic music reading skills gained through either playing an instrument or singing.

PIANO 1
2.5 Credit Semester Course
This course is designed for students with no prior piano playing experience. Through individualized and group instruction, students will learn how to play simple pieces on the piano, as well as basic music reading and music theory skills.

PERCUSSION ENSEMBLE
5 Credit Full Year Course
Percussion Ensemble is an instrumental ensemble for people who play percussion instruments. Percussion instruments include marimba, vibraphone, xylophone, glockenspiel, piano, snare drum, tenor drums, bass drum, auxiliary percussion, and timpani. Emphasis will be on the presentation and performance of grade III-V percussion literature. Students will hone individual playing techniques, as well as develop ensemble skills throughout the year. The focus will be full ensemble performance, although chamber music, music theory, and music history will also be studied. Students will have the opportunity to audition for the Central District Music Festival. Although it is not required, private study is highly recommended for students in this class. Students are required to perform in all band concerts at the high school.

TREBLE CHOIR
5 Credit Full Year Course
Treble Choir is for skilled soprano and alto voices including students for whom this is their first choral experience at the high school level. This Choir studies and works to master vocal registers and transitions, breathing technique, diction, sight singing skills, and multi-part harmony, all of which address specific Vocal Performance Standards in Music Education. Repertoire appropriate to treble voices will be studied and performed throughout the year. The level of this choir’s repertoire is upper secondary to collegiate level. Students are required to participate in all three evening choral concerts throughout this school year, as well as participate in the MICCA Choral Festival. Acceptance to this class is by audition.

WIND SYMPHONY
5 Credit Full Year Course
Wind Symphony is an accelerated large ensemble for students who play band instruments. Emphasis will be on the preparation and performance of grade IV-VI wind literature. Students will hone individual playing techniques as well as develop ensemble skills throughout the year. Although the focus will be full ensemble performance, chamber music, music theory, and music history will be studied. Students will have the opportunity to audition for the Central District Music Festival. Although it is not required, private study is highly recommended for students enrolled in this course. Students are required to perform in all band concerts at the high school and the MICCA Festival. Admission to this class is by audition only.
Physical Education

The Health, Nutrition, and Fitness courses are designed to educate students in promoting their personal health, while encouraging them to practice healthy habits, reduce unhealthy risk-taking, and make informed decisions. The comprehensive health curriculum is aligned with both the State and National health and physical education standards. The Physical Education program encourages students to learn about their physiological development and to properly maintain a practical use of fitness in everyday life. The department offers a variety of courses that encompass the wellness paradigm of physical, mental and social health. Students will attain the attitude, knowledge, and skills to achieve health literacy, practice health-enhancing behaviors, and make health-promoting decisions for life.

During freshmen year, students take Fundamentals of Fitness, a physical education class in which they learn the core elements of developing and maintaining a healthy lifestyle. Wellness, taken by all sophomores, prepares students to acquire, manage and promote their physical, psychological, social and sexual health.

Upperclassmen have the opportunity to take a wide range of elective courses that were created to meet the needs of every student with their unique talent, ability, and interest. Elective courses include opportunities to participate in team sports, compete, or explore alternative opportunities in physical education.

**PHYSICAL EDUCATION**

**FUNDAMENTALS OF FITNESS**
2.5 Credit Semester Course  
Required Course #: PE921  
Grade 9 Requirement  
The freshman Fundamentals of Fitness course provides the foundation of knowledge necessary to improve all components of physical fitness: flexibility, cardio-respiratory fitness, muscle fitness (including endurance and strength training) and body composition. Through personal goal setting, use of the F.I.T. parameters of overload and other training principles, students create an individualized fitness program that includes cardio-respiratory and resistance training components in compliance with the state and national standards. Emphasis is placed on training the core and developing proper body mechanics and safety when using the resistance training equipment and cardio machines in the Fitness Room. This course also offers an introduction to the health and wellness curriculum by including a brief overview of nutrition principles, including the essential nutrients and dietary choices as they relate to body composition and lifelong physical fitness.

**WELLNESS**
2.5 Credit Semester Course  
Required Course #: PE913  
Grade 10 Requirement  
The Wellness course focuses on the interrelationship between physical, mental, and social health. The curriculum encompasses specific overarching objectives, including disease prevention, personal health promotion, and health literacy. Core themes include making healthy choices, personality and self-esteem, stress management, relationships, reproductive health, violence prevention, and alcohol, tobacco and drug prevention. The course is structured around cooperative learning, small group activities, role-playing, discussion, problem solving, and project presentations. Teamwork, respectful dialogue, cooperation, and active participation are expected during all class interactions. In addition, we partner with local healthcare agencies to provide educational resources and facilitate presentations on current health topics.

**PHYSICAL EDUCATION ELECTIVES**

**LIFETIME FITNESS**
2.5 Credit Semester Course  
Elective Course #: PE910  
Recommended for grades 11-12  
Staying healthy and fit should be a lifelong goal. A lifetime fitness curriculum aims to educate students on topics such as exercise, nutrition, and stress management to promote healthy choices throughout a lifetime. This course will help students understand the positive effect exercise has on the body and mind, and the role good nutrition has on their well-being. It is created to expose students to activities such as strength training, yoga, Pilates, barre, walking for fitness, racquet sports and other group games in a non-competitive environment. This course will demonstrate the many diverse ways to stay active and physical throughout your life while also learning about healthy eating and stress coping behaviors.
MIND-BODY FITNESS

Elective Course #: PE923
2.5 Credit Semester Course
Recommended for grades 11-12

The Mind Body Fitness elective is designed to provide an array of physical fitness exercises that incorporate a meditative or mindful state. These exercises will combine body movement, mental focus, and controlled breathing to improve strength, balance, endurance and flexibility. The physical exercise modalities will include power yoga, Pilates, walking, cardio machines and resistance training with emphasis on breath awareness and mindfulness. Various relaxation and meditation techniques will also be implemented. These practices will promote inner mental focus, concentration of muscle movement, synchronization of movement and breathing patterns, personal wellbeing and overall stress management.

PERSONAL/GROUP FITNESS TRAINING

Elective Course#: PE912
2.5 Credit Semester Course
Recommended for Grades 11-12

The Personal/Group Fitness Course is an elective course that is intended to follow the Fundamentals of Fitness Course in the department continuum. This course is based on the four aspects of Physical Fitness: Cardio Respiratory Fitness, Muscle Fitness, Flexibility, and Body Composition. Students will design their own personal workout programs and the majority of class time will be spent exercising according to these personal plans. Students will also have the opportunity to participate in group exercise such as different types of fitness circuits. Students will apply systematic aerobic conditioning concepts to find heart rate training zones and F.I.T. (frequency, intensity, and time) measures for their cardio respiratory plans. Students will learn and apply many muscle fitness principles and will also employ the F.I.T. measures for their personal program goals. We will use the Fitness Room, including the cardio machines, free-standing weights, weight machines, stability/medicine balls, bosu trainers, and resistance bands. This very independent participation based course promotes learning through physical performance of learned skills and techniques.

TEAM SPORTS

Elective Course #: PE918
2.5 Credit Semester Course
Recommended for grade 11-12

This team sports class will include instruction of skills and active participation in a variety of sports and alternative team based games. Some of the sports and activities offered in this course will include traditional games such as soccer, volleyball, basketball, softball; also, team centered alternative games such as tchoukbal, capture the flag, flag football, nitroball, speedball, futsal, triangleball, ultimate Frisbee; and racquet sports such as pickleball and badminton. This participation course promotes respect, healthy competition, sportsmanship, cooperation, and self-motivation. Students should have a general knowledge/background of sports as they enter this course.
Science

The science department offers courses that are designed to accommodate both the academic needs, as well as the interests of our students. Our courses teach students the knowledge and skills necessary to ask questions, make observations, design experiments, gather and analyze data, and draw conclusions that can be shared and communicated to others. Laboratory courses, in particular, provide an opportunity for students to utilize the technological tools of the scientist in developing the practices and skills necessary for graduation and beyond.

The graduation requirement in science coursework is the successful completion of three laboratory science classes (15 credits). It is recommended that college-bound students take courses in biology, chemistry, and physics, beginning with biology their freshman year. Students may enroll in more than one full credit science course in any given academic year, as well as any electives they are interested in, individual schedules permitting. We offer Advanced Placement ® (AP) courses in biology, chemistry, physics and environmental science as well as a wide range of electives such as Earth and Space Science, Genetics and Biotechnology, Forensics and Nutritional and Exercise Science.

### SCIENCES

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<thead>
<tr>
<th>COURSE</th>
<th>AP® Course #: SC571</th>
<th>RECOMMENDED GRADES</th>
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<tbody>
<tr>
<td><strong>ADVANCED PLACEMENT BIOLOGY</strong></td>
<td>7.5 Credit Full Year Course</td>
<td>Recommended for grades 10-12</td>
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<td><strong>LAB</strong></td>
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<tr>
<th>COURSE</th>
<th>AP® Course #: SC581</th>
<th>RECOMMENDED GRADES</th>
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<tr>
<td><strong>ADVANCED PLACEMENT CHEMISTRY</strong></td>
<td>7.5 Credit Full Year Course</td>
<td>Recommended for grade 11-12</td>
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<td><strong>LAB</strong></td>
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ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE

AP® Course #: SC583
Recommended for grades 11-12

Lab Course
Advanced Placement Courses provide an opportunity for students to experience a college course while still in high school. AP courses follow a syllabus that has been approved by the College Board, and teachers must receive specialized training to teach the courses. Although it is not required, it is expected that students who take AP courses will also register for the national AP exam at their own expense. The AP Environmental Science course is designed to be the equivalent of an introductory college course in environmental science. In this course, students will be studying modern environmental issues integrating concepts from biology, earth science, and chemistry. The course is designed to provide students with scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and man-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Students will participate in field studies to collect and analyze authentic data and to evaluate specific environments.

ADVANCED PLACEMENT PHYSICS 1

AP® Course #: SC544
Recommended for grades 11-12

Lab Course
Advanced Placement Courses provide an opportunity for students to experience a college course while still in high school. AP courses follow a syllabus that has been approved by the College Board, and teachers must receive specialized training to teach the courses. Although it is not required, it is expected that students who take AP courses will also register for the national AP exam at their own expense. AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations, as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. The course is based on six Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about the physical world.

ADVANCED PLACEMENT PHYSICS C: Mechanics

AP® Course #: SC545
Grade 12*

*Recommended for grade 12 students who have taken or are taking a calculus course and have completed a physics course.

Lab Course
Advanced Placement Courses provide an opportunity for students to experience a college course while still in high school. AP courses follow a syllabus that has been approved by the College Board and teachers must receive specialized training to teach the course. Although it is not required, it is expected that students who take AP courses will also register for the national AP exam at their own expense. AP Physics C: Mechanics is a calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in one of the physical science or ENGINEERING. Students cultivate their understanding of physics through classroom study and activities as well as hands-on laboratory work as they explore concepts like change, force interactions, fields and conservation.

BIOLOGY

College Prep Course #: SC523
Accelerated Course #: SC522
Recommended for grades 9-10

Lab Course
This course is designed to teach biological concepts and laboratory skills that will equip students for further study in the scientific disciplines. Students will learn biological technology, terminology, and the scientific method. Course topics include biochemistry, cell biology, reproductive biology, genetics, microbiology, taxonomy, evolution, and the structure and function of both plants and animals. These topics are taught within a developmental framework, stressing the relationship between structure and function in living things.

CHEMISTRY

College Prep Course #: SC533
Accelerated Course #: SC532
Recommended for grades 10-12

Lab Course
Topics in this course include matter, energy, scientific measurements, solutions, atomic structure, periodic law, chemical bonding, stoichiometry, nuclear chemistry, and gasses. This course is fast-paced; math application is advanced; lab techniques will be developed, and digital technology is used extensively. Students electing the Accelerated version of this course should possess very strong math skills.
ENVIRONMENTAL SCIENCE
5 Credit Full Year Course
Lab Course
This course combines the study of local ecosystems with that of current issues. Human use and misuse of the environment are emphasized. Topics include energy production and consumption, soil properties, water use and water ecology, water quality, natural disasters, habitat destruction, human population growth, global climate change, and solid waste issues. The course involves a variety of hands-on labs and projects, as well as long-range research assignments relating to environmental issues. Frequent trips outdoors should be expected, even in cold weather.

PHYSICS
5 Credit Full Year Course
Lab Course
Relying on their math skills, diligent lab work, and the scientific method, students will complete lab and project work to recognize and solve problems in these classic topic areas: light, sound, wave theory, linear and circular motion, projectile and 2-dimensional motion, freefall, forces, universal gravitation, work, power, energy, impulse and momentum, magnetism, and electricity.

SCIENCE ELECTIVES

ANATOMY AND PHYSIOLOGY
5 Credit Full Year Course
In this Project Lead the Way (PLTW) elective course, students study the structure and function of the human body. Students design experiments, conduct investigations, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal mannequin, work through interesting real world cases, and often play the role of biomedical professionals to solve medical mysteries. This course will be of particular interest to those students intending to follow careers in any of the medical and health fields, as well as careers in physical education, science, and biology. Students who have a demonstrated interest in the biological sciences will also tend to do well in this course.

ANATOMY: SYSTEMS
2.5 Credit Semester Course
(Anatomy and Physiology: Systems) This content-driven survey course is designed to introduce students to the major body systems needed for survival and homeostasis. This course supports students who are currently in Biology, Anatomy and Physiology, or AP Biology, or simply wish to know more about their bodies and how they work. The two sections of the course will cover different body systems; students may sign up for one or both of them. Body systems covered in the course will include nervous, endocrine, immune, circulatory, respiratory, digestive, excretory, and reproductive. Content will be explored through dissection, lecture, projects, and multimedia presentations.

ANIMAL BEHAVIOR
2.5 Credit Semester Course
Would you like to work in a zoo? Do you want to know about careers for people that love to work with animals? Do you ever wonder how animals communicate or behave the way they do? This course will explore the answers to these questions and much more as we learn about the fascinating work of animal behavior. In this course, we will learn how animals are classified, analyze the amazing diversity of life on our planet, interpret animal communication and social structures, and explore career options in the field of animal science.

ASTRONOMY
2.5 Credit Semester Course
Astronomy is a course which includes topics such as our view of the night sky; using telescopes; motions of heavenly bodies; the planets and moons of our solar system; views of the origin and evolution of the universe (cosmology); historical views of the cosmos; the search for extrasolar planets; the possibility of extraterrestrial life; and the life cycles of stars, including black holes and
supernovae. The course will review pertinent science topics from prior science courses, and serve as a way for students to combine physics, chemistry, and biology concepts through the study of astronomy.

**FORENSIC SCIENCE**
2.5 Credit Semester Course
Elective Course #: SE587
Recommended for grades 11-12
Forensic science is an elective course for those who wish to study the application of science to law. This is a project-based course involving all areas of science, including biology, anatomy, chemistry, physics, and environmental studies. There is an emphasis on complex reasoning and critical thinking. Topics will include forensic science versus investigation and other scientific processes, fingerprint recovery and identification systems, lip and bite print identification, hair and fibers, body tissues and parasites, documentation, bombs, arson, and profiling. Guest speakers, when available, will share their expertise with the students. Due to the nature of the material, a certain level of maturity is required, as well as the ability to work safely. Note: Forensic Science will not replace the college entry requirement of Chemistry.

**GENETICS AND BIOTECHNOLOGY**
2.5 Credit Semester Course
Elective Course #: SE585
Recommended for grades 10-12
This elective course uses a variety of laboratory experiences, lectures, and projects to introduce students to the growing field of genetics. It includes the study of basic Mendelian genetics, gene action, genetic mutations, genetic diseases and abnormalities, genetic engineering and manipulation, biotechnology, and genetic counseling.
Our Social Studies curriculum is designed to teach and engage students in the history of the modern world, as well as in our own nation's diverse cultural and political heritage. It is through the study of the world and American history that students will begin to recognize how our nation's ideals and worldwide events have influenced the issues, institutions, and practices of modern day. It is also a focus of our curriculum to encourage and allow students to become informed and active citizens in the communities in which they live.

As freshmen, students will first explore topics in world history such as the early world empires and how these ancient regimes were toppled and overthrown as changes to government and religion dramatically reshaped the world order. New ideas on government and a citizen's place in society will be introduced in the Enlightenment and the French Revolution, planting the seeds of knowledge for the students’ future studies of the birth of our own nation. Students will examine historic events, literature, art and music, and will demonstrate their knowledge through independent research, collaboration, and projects.

Sophomores will take US History I exploring the beginnings of the nation through the end of the 19th century, focusing on the issues that challenged and divided the new nation. Juniors will continue their study of history with US History II. In this course, students will dive into 20th century America, stressing the political, economic, cultural and social changes that defined America in modern times. Students in these classes will demonstrate their understanding through presentations, essays, projects and exams. Juniors also have the choice to take Advanced Placement US History, which culminates in an AP exam in May.

All students are encouraged to take advantage of the wide range of electives offered in the Social Studies department. Popular electives offered include *History Through Comics and Graphic Novels* and *Sociology & Psychology*. New electives offered this year include *Modern World History* and *AP Macroeconomics*.

### SOCIAL STUDIES

**ADVANCED PLACEMENT® U.S. HISTORY**

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<th>Course</th>
<th>AP® Course #: SS270</th>
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<tr>
<td>5 Credit Full Year Course</td>
<td>Recommended for grades 11-12</td>
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Advanced Placement Courses provide an opportunity for students to experience a college course while still in high school. AP courses follow a syllabus that has been approved by the College Board, and teachers must receive specialized training to teach the courses. Although it is not required, it is expected that students who take AP courses will also register for the national AP exam at their own expense. This course is organized as a survey of United States history. Students will improve their analytical skills and will be expected to make use of a variety of supplementary reading materials, while writing essays. This course is fast-paced and involves considerable textbook reading and note-taking. This course meets the Grade 11 social studies requirement when taken as a junior.

**U.S. HISTORY I**

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<th>Course</th>
<th>College Prep Course #: SS232</th>
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<tr>
<td>5 Credit Full Year Course</td>
<td>Accelerated Course #: SS232</td>
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<td>Grade 10</td>
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Students begin with a review of the origins of the American Revolution and how ideas and goals of a democratic society translates into actions within social elements and government. Students will then examine how democratization and expansion tested the relationships between federal and state authority, and how changing roles in leadership and ideas influenced differing responses and experiences from multiple perspectives. Students will also identify and analyze how economic and technological developments in transportation, industrialization, and agriculture, influenced the creation of social hierarchies as well as how the role of slavery influenced and impacted the economy and politics of the time. Students will continue to use these themes to help explore the social and political causes and consequences of the Civil War, immigration and industry. Major assessments include an independent research paper, group and individual projects, and various types of class presentations.
U.S. HISTORY 2
5 Credit Full Year Course

This junior course begins with a review of the effects of Industrialization on American society at the beginning of the 20th century and the Progressive reformers who sought to make positive change. It is in this unit that juniors will be introduced to their civic action project, which will be ongoing throughout the year. Students will then learn about the economic history and circumstances surrounding events such as WWI, the Great Depression, New Deal, WWII and the Cold War. Other major topics of study include the Civil Rights movement, Watergate, end of the Cold War, and 9/11. Utilizing a variety of primary and secondary sources, students will engage in a variety of assignments and assessments including essays, research projects, tests, quizzes, and class presentations.

WORLD HISTORY 800-1814
5 Credit Full Year Course
Grade 9

In this course, students will explore the beginnings of modern Europe and the Middle East from 800 to 1814 CE. Societies began to form on the basis of ethnicities, religion, and government, leading to long lasting empires (the Ottoman Empire and Seljuk Turks) that students will trace the progress of. Major revelations and events that brought great change to Europe that will be covered include dynastic societies, the Crusades, the Renaissance, Reformation, Scientific Revolution, and the French Revolution. In this course, students will focus on developing note-taking skills which will benefit them for the remainder of the history courses that they will take throughout high school. Students will have opportunities to continually improve upon their writing skills by composing essays as well as DBQs, which will introduce them to primary sources. Group projects will be assigned to ensure that students learn how to work with others as well as fine-tuning their time management skills.

SOCIAL STUDIES ELECTIVES

ADVANCED PLACEMENT® MACROECONOMICS
5 Credit Full Year Course
AP® Course #: SS278
Recommended for grades 11-12

AP Macroeconomics and AP Microeconomics are run on a two-year cycle. AP Macroeconomics will run during the 2021-2022 academic year. This course is an introductory college-level macroeconomics course. Students study the principles that apply to an economic system as a whole. Students will learn about the US economy by using principles and models to describe economic situations. Students will predict and explain outcomes using graphs, charts, and data as they explore concepts like economic measurements, markets, macroeconomic models, and macroeconomic policies.

ADVANCED PLACEMENT® MICROECONOMICS
5 Credit Full Year Course
AP® Course #: SS277
Recommended for grades 11-12

AP Macroeconomics and AP Microeconomics are run on a two-year cycle. AP Microeconomics will run during the 2022-2023 academic year. AP Microeconomics is an introductory college-level microeconomics course. Students will study the economic functions of individual economic decision-makers. Students will learn about how households and businesses interact in the economy using theories and models to describe economic situations and predict outcomes. Students will use graphs, charts, and data as they explore concepts like scarcity and markets; costs, benefits, and marginal analysis; production choices and behavior; and market inefficiency and public policy.

ADVANCED PLACEMENT® PSYCHOLOGY
5 Credit Full Year Course
AP® Course #: SS259
Recommended for grades 11-12

Advanced Placement Courses provide an opportunity for students to experience a college course while still in high school. AP courses follow a syllabus that has been approved by the College Board, and teachers must receive specialized training to teach the courses. Although it is not required, it is expected that students who take AP courses will also register for the national AP exam at their own expense. This yearlong course will introduce students to the systematic and scientific study of human behavior and mental processes. By the end of this course, students will be able to understand the human mind and behavior and be able to figure out why people think, feel, and do what they do. Students will be prepared to take the AP exam in the spring by taking the class. The goal of this course is to provide an overview of the theory and empirical research in the field of psychology. Students learn the various methods psychologists use in their practice. Students will follow in the footsteps of psychologists and be asked to question, develop theories, and conduct experiments to better understand human behavior.
**AMERICAN GOVERNMENT and POLITICS**

5 Credit Full Year Course

In this accelerated level course, students will revisit and review the founding documents of the United States and Massachusetts with an emphasis on understanding their relevance and impact on policies and politics in the present. Students will explore what it means to be an active and informed citizen as well as developing an opinion on how involved America should be in world affairs. This course is designed around supporting questions that are intended to stimulate teachers’ and students’ own questions for discussion and research. Some of these questions include “How are the founding principles reflected in contemporary debates over the role of government?” and “What are the roles of political parties, interest groups, and media in influencing public policy?” Major assessments will include classroom debates and discussions as well as a research based opinion paper on a contemporary political issue of the students’ choice.

**ECONOMICS**

5 Credit Full Year Course

This accelerated level course introduces students to the building blocks of our economy. Students will learn how individuals and businesses interact in the marketplace. Key concepts include supply and demand, the labor market, money and banking, and the role of individual businesses in our economy. In addition, this course provides an introduction to key concepts of economics as a whole. Students will study how GDP, unemployment, and income are measured in our country. Students will also learn about economic booms and busts and policies that are used to reduce the negative impact of those fluctuations. Finally, the course will study the impact of globalization on the world economy. Students will learn these concepts in both theory and real-world applications.

**HISTORY THROUGH COMICS AND GRAPHIC NOVELS**

2.5 Credit Semester Course

Elective #: SS276
Recommended for grades 9-10

Comic books and graphic novels often parallel or adapt to the real world events surrounding them. In this course, students will take a deeper look into these historic events, people, and characters spanning the 1930s to present day as we take a look at history through the medium of comics and graphic novels. Students will read a variety of comic books and graphic novels paired with historical texts to gain a deeper understanding of historical time periods. Possible assignments include creating your own comic complete with writing and sequential art, developing podcasts, videos, and other multimedia projects as well as strengthening writing and research skills.

**JUSTICE AND THE LAW**

2.5 Credit Semester Course

Elective Course #: SS251
Recommended for grades 9-10

Justice and the Law is a semester long social studies elective that serves as an introductory course to law and legal systems in the United States. During the semester, students will cover topics such as Introduction to Law, Constitutional Law, Criminal Law, and Civil Law and learn how they apply to real life situations. Students will learn through the use of case studies, research projects, group discussion/debate, guest speakers, and mock trials throughout the year in this engaging class.

**MODERN WORLD HISTORY**

5 Credit Full Year Course

Elective Course #: SS225
Recommended for grades 11-12

Picking up where students ended freshman year, this elective will allow them to put into context the contemporary world in which we live. Beginning at the turn of the 20th century, new practices in industrialization and urbanization swept the world, providing capital for countries to expand their borders in places where they did not previously exist: India, China, and the Belgian Congo. As nationalistic movements created new nations, WWI and WWII left catastrophic results. A new world power, the Soviet Union emerged, spreading their ideas and influence throughout the world. The Cold War dragged on for years, with countries either fighting for or against communism. Other interesting topics of study will include South African apartheid, decolonization, the Israel Palestine conflict, genocides of the 20th Century, globalization, and modern Middle Eastern conflicts. Instructional activities and assessments will include individual and group projects, classroom simulations, primary source activities, film discussions, and various writing assignments.
This full year course is designed to give a general introduction into the fields of psychology and sociology. The field of psychology helps us to understand our human behavior and mental processes from an individual point of view. Major topics will include origins of psychology, their research methods, biological psychology: our brain, states of consciousness: sleep, dreams, and effects of drug use, and cognition: memory. The field of sociology can help us to understand ourselves better as we examine how the social world influences the way we think, feel, and act. Major topics will include origins of sociology, their research methods, socialization, deviance, and social inequality. The purpose of this course is to provide a window into the fields so we can better understand ourselves and the world around us. Group interaction, discussion, and reflection are core expectations for students enrolled in the course.
Special Education

All students at North Middlesex Regional High School, including students identified with special learning needs, are enrolled in courses aligned with the academic standards in the Massachusetts Curriculum Frameworks. The Special Education Department at North Middlesex Regional High School implements the Massachusetts Curriculum Frameworks by providing active student involvement in the subject matter directly connected to the common core of learning. Students identified with special learning needs through the evaluation process will access instructional materials and information through various means to proactively target skills. The Special Education TEAM will determine specific classes for each student. If you have any specific questions about your child’s schedule, please contact Beth Baldarelli, Special Education Department Chair at bbaldarelli@nmsd.org or call 978-597-8721 and ask for Beth.
### Specialized Programs

#### ACADEMIC ASSISTANCE

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Course Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>2.5 Credit Semester Course</td>
<td>SP955</td>
<td>This course is designed to provide students with specifically designed instruction focusing on new skills and strategies to understand themselves as learners. This class also focuses on the development of study, comprehension and retention strategies, and organizational skills needed to improve performance in content area classes. A variety of methods including breaking assignments into manageable steps, and re-teaching and guided practice are incorporated into the daily curriculum.</td>
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<tr>
<td>5 Credit Full Year Course</td>
<td>SP957</td>
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#### ENGLISH LANGUAGE LEARNING 1 - Foundational

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<tr>
<th>Course Code</th>
<th>Description</th>
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<tr>
<td>EN187</td>
<td>This course introduces Foundational level English Learner (EL) students to basic structures and vocabulary of the English language through the skills of reading, writing, speaking and listening. EL students learn strategies to advance their reading, listening, and pronunciation skills. They expand oral comprehensibility and write complete sentences, a standard paragraph, and short content-based essays. They utilize level-appropriate conventions of grammar and punctuation with a minimum of errors. This course contributes to skills needed in mainstream classes.</td>
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#### ENGLISH LANGUAGE LEARNING 2 - Transitional

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<th>Course Code</th>
<th>Description</th>
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<tr>
<td>EN188</td>
<td>In this course, Transitional English Learner (EL) students discover how to use and extend their vocabulary, grammar, and communication skills more consciously and effectively for academic purposes. This course is similar to a mainstream English course in that students analyze classic literature and write multi-draft essays of various forms. Students participate in whole-class and small-group academic discussions. This course contributes to skills needed in mainstream classes and higher education.</td>
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#### EXTERNSHIP

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<th>Course Code</th>
<th>Description</th>
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<tr>
<td>CS990</td>
<td>Juniors with a “C” average or better may apply to complete an External Internship (outside of NMRHS) in their senior year. This elective course is an opportunity for students to gain valuable experience in a potential college major field of study. Students will propose the location of the external internship and submit appropriate documentation showing approval by the prospective company. Interested students must have reliable transportation. Program requirements will include work logs, reflections, site check-in, as well as a final Capstone Presentation. Students will be expected to intern for four hours per week. Due to the rotating schedule at NMRHS, hours may be completed after school or on weekends. Approved students may sign in late, sign out early or use the designated block as a study time in the NMRHS Library. Applications will be approved by parents, guidance, staff, as well as the internship coordinator.</td>
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<tr>
<td>CS991</td>
<td>Elective Course #: CS990</td>
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#### INTERNSHIP

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<th>Course Code</th>
<th>Description</th>
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<tr>
<td>CS264</td>
<td>This program is an occupational internship, which provides students with “hands-on” work experience. Students are encouraged to locate a site related to their career interests. Educational and professional, as well as occupational experiences are the responsibility of the student. Internship is open to students who are in good standing in academics, attendance, and conduct. Students must complete proper paperwork with the assistant principal and guidance counselor before signing up for the course.</td>
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#### VIRTUAL HIGH SCHOOL (VHS)

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<th>Course Code</th>
<th>Description</th>
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<tr>
<td>CS990</td>
<td>Virtual High School is a rigorous online learning opportunity. Over 250 semester, full year, and Advanced Placement courses are offered. To see the entire list of courses, go to <a href="http://www.govhs.org">www.govhs.org</a> and click on the Program Catalog. Courses follow a set academic calendar, but students can complete their work online at any time of day or night, as long as they meet their specified due dates. Online learning is tailored to self-motivated, dedicated, hard-working students who are interested in challenging themselves. Paperwork is available in the library and spots are limited.</td>
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<tr>
<th>Course Code</th>
<th>Recommended for</th>
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<tr>
<td>SP955</td>
<td>grades 11-12</td>
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**Visual Arts**

The Visual Art Department provides courses that range from introductory/foundations in traditional and digital media through Advanced Placement offerings. The sequential curriculum is designed to build a body of knowledge in all the visual arts disciplines: Ceramics, Drawing & Painting, Graphic Design, and Media Arts. Students gain practical skills and the opportunity for real-world experience via exhibitions, state and national competitions, community partnerships, etc. The Visual Art department provides support for students who plan to pursue a career in art by assisting students in preparing an art portfolio for college admission, and facilitating guest visits and presentations from leading art colleges.

**GENERAL ARTS**

The following art courses can be taken without having completed any prior art courses.

**PHOTOGRAPHY**

2.5 Credit Semester Course

This introductory class will study and practice the basic techniques of photography. Students will learn the art and history of photography. Students will learn to control, and manage a 35mm digital DSLR camera. Students can expect to use class time to take pictures with a digital 35mm DSLR camera provided by the school. Cameras may not be taken off campus. Students should expect to participate in group critiques and in all classroom demonstrations. This course will help students become familiar in the fundamentals of digital photography and critique. Four areas of instruction will be emphasized: How cameras work, the rule of thirds, how lighting effects and image, how to use Adobe Photoshop for basic editing skills. Students will receive instruction, demonstrations, and see samples of the desired outcomes, at the beginning of each period.

At the end of this course, you will:

- Know how to use various technical features of the camera to have creative control of your photographs.
- Be able to decide what type of lighting to use in a given situation to produce optimum results.
- See how photographic composition can influence the viewer
- Understand how to use Adobe Photoshop to improve the overall appearance of images

**FINE ARTS**

The following art courses provide sequenced instruction for learners to continue to build a body of knowledge in each discipline.

**FOUNDATIONS OF ART**

2.5 Credit Semester Course

The focus of this course is to develop the artistic skills and techniques required for further study in the visual arts. In this combined academic/studio art course, the student will be introduced to the fundamental components of visual art through the study of the elements of art and principles of design. Through project-based experiences, students will explore a variety of materials while learning skills in areas of observational drawing, color theory & painting, linear perspective, and sculptural activities. Sketchbooks will be used for practice and proficiency activities. Students will be required to use the course textbook to read and complete supplemental course work; complete homework assignments; and conduct research. **This course is necessary for those who plan to continue their study of art in the upper-level courses such as Ceramics and Drawing & Painting.**

**CERAMICS 1**

5 Credit Full Year Course

This course is open to students who have completed Foundations of Art. The Foundations of Art requirement can only be waived through portfolio review. Students in Ceramics 1 will explore three-dimensional design using clay as the medium, with an emphasis on the fundamentals of formation, surface design, and glaze applications. Students will create both functional and decorative sculptural pieces through traditional hand-building techniques (pinch, slab, coil, and press/drape molds) with a focus on technique and craftsmanship. Learning will occur within the context of art history/culture and criticism. Students will be required to know and use art and ceramics terminology; maintain a sketchbook for drawing practice and project planning activities; complete homework assignments, and conduct research.
CERAMICS 2
Elective Course #: VP840
5 Credit Full Year Course
Recommended for grades 11-12
This course is open to students who have completed Ceramics 1. This course continues the progressive development of technical skills learned in Ceramics 1 with a focus on advanced hand-building techniques and introduction to wheel throwing. Students will be expected to demonstrate initiative, commitment, and experimentation with an emphasis on the development of personal style. Students will explore conceptual problem solving through more involved and complex assignments, and will experiment with slips, resists, and layered finishing techniques. Learning will occur within the context of art history/culture and criticism. Students will be required to know and use art and ceramics terminology; maintain a sketchbook for drawing practice and project planning activities; complete homework assignments, and conduct research.

DRAWING & PAINTING 1
Elective Course #: VP829
5 Credit Full Year Course
Recommended for grades 10-12
This course is open to students who have completed Foundations of Art. The Foundations of Art requirement can only be waived through portfolio review. Using skills and techniques acquired in Foundations of Art, students will continue to develop their technical abilities in drawing from observation and imagination. Students will be introduced to drawing and painting styles and methods, both traditional and contemporary, with an emphasis on expressing ideas through various media. The mediums used in this class may include graphite, pen & ink, ink wash, charcoal, pastels, colored pencils, acrylics, oils, watercolors, and mixed media. Learning will occur within the context of art history/culture and criticism. Students will be required to maintain a sketchbook within and outside the classroom, complete homework assignments, and conduct research.

DRAWING & PAINTING 2
Elective Course #: VP840
5 Credit Full Year Course
Recommended for grades 11-12
This course is open to students who have completed Drawing & Painting I. This course further develop the skills and techniques learned in Drawing & Painting I. Students will focus on the development of a personal style and originality of concepts and images through more involved and advanced assignments, with an emphasis on higher level thinking skills and aesthetics. Traditional and experimental techniques will be explored using a wide variety of drawing and painting media. Learning will occur in the context of art history/culture and art criticism. Students will be required to maintain a sketchbook within and outside the classroom, complete homework assignments, conduct research, and participate in written and oral critiques.

DRAWING & PAINTING 3
Elective Course #: VP835
5 Credit Full Year Course
Recommended for grade 12
This course is designed for students who have completed Drawing & Painting 2, and wish to continue their study of art, whether to prepare for a career path or to simply develop their skills and techniques at the next level. Students will focus on developing a body of work in a series, using mediums of their choice. Originality of concepts and images through more involved and advance assignments will be emphasized. Students may build a portfolio of work for the college application process. Learning will occur in the context of art history/culture and art criticism. Students will be required to maintain a sketchbook within and outside the classroom, complete homework assignments, conduct research, and participate in written and oral critiques.

GRAPHIC ARTS

The following art courses provide sequenced instruction for learners to continue to build a body of knowledge in each discipline.

FOUNDATIONS OF GRAPHIC DESIGN
Elective Course #: VP733
2.5 Credit Semester Course
Recommended for grades 9-10
Students will learn the basic principles of design, composition, and color theory in this introductory course. Projects and class meetings will be structured to help students develop a design concept using the elements of art. The goal of this course is to provide a rigorous understanding of these foundational principles and skills, which will then serve as a strong base for all future graphic design work. This course is necessary for those who plan to continue their study of art in upper-level graphic design courses.
**GRAPHIC DESIGN 1**

5 Credit Full Year course

This course is for students who have successfully completed Foundations of Graphic Design. Students will engage in a continuing examination of principles of design, spatial relationships, typography and imagery as they apply to practical visual solutions for print and web. Color theory and composition techniques are explored and practiced. Adobe Illustrator and Photoshop are used as the design media for all projects.

**GRAPHIC DESIGN 2**

5 Credit Full Year course

This course is for students who have successfully completed the full year Graphic Design 1 course. This course is designed for students with interest in art and design as a career choice. Emphasis is on the development of strong concepts and how to communicate persuasively and effectively. Graphic Design students should have strong Adobe Illustrator / Photoshop skills.

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**MEDIA ARTS**

The following art courses provide sequenced instruction for learners to continue to build a body of knowledge in each discipline.

**FOUNDATIONS OF MEDIA PRODUCTION**

2.5 Credits Semester Course

In this introductory course, students will learn the fundamental phases of media production necessary to write, record, and edit short-form audio and video content. Projects created in class will range from documentary films to music videos. Additional topics of study will include film analysis and critique, character archetypes, and script structure. This course will serve as a strong basis for all future media production work and is required for those who plan to continue their studies in the upper-level media arts courses.

**MEDIA PRODUCTION 1**

2.5 Credit Semester Course

This course is open to students who have completed Foundations of Media Production. Students will build on their prior digital filmmaking skills and knowledge by learning the fundamentals techniques of visual effects compositing from planning to post production. Projects created in class will include effects ranging from green screenning and live-action doubling, to object masking and frame-by-frame rotoscoping. Additional topics of study will include visual effects history with pre-visualization and breakdowns. The course is designed for students with an interest in advanced media production techniques who may be considering careers in filmmaking, graphic design, and/or audiovisual arts.

**MEDIA PRODUCTION 2**

2.5 Credit Semester Course

This course is open to students who have completed Media Production 1. Students will further their existing knowledge and understanding of digital filmmaking to produce high-quality projects. Projects created in class will range from scripted short films to episodic TV programming. Additional emphasis will be placed on storyboarding, screenwriting, on-camera performance, cinematography, and video editing. This course is designed for students with an interest in professional media production who are considering careers in writing, acting, directing, editing, and/or journalism for film/television.

**ADVANCED MEDIA PROJECTS**

5 Credit Full Year Course

This course is open to students who have completed Media Production 2. Students will begin the semester with a project concept that they will fully produce to completion by the end of the school year in this open studio course. This course is designed for students with a dedicated interest in media production as a career choice. The course emphasizes the completion of a well-conceptualized written, directed, and edited film/television project or series of episodic mini-projects. Students must be willing and able to work independently or in small groups on a project from concept to completion in this course.
ADVANCED PLACEMENT ARTS

ADVANCED PLACEMENT 2-D Art and Design
5 Credit Full Year Course
AP® Course #: VP839
Recommended for grades 11-12

ADVANCED PLACEMENT 3-D Art and Design
AP® Course #: VP841

Admission to this course is by Portfolio Review only. Students taking AP 2-D Art and Design must have completed Drawing and Painting 1 and 2 or Graphic Design 1 and 2. Students taking 3-D Art and Design* must have completed Ceramics 1 & 2. (*Note: Student who select any 3-D approach other than ceramics must provide their own materials.) Students enrolled in this course must meet with the instructor during the fourth quarter of the preceding school year to discuss requirements and receive summer assignments.

This course is designed for students seriously interested in the study of visual art, who anticipate entrance to college with a major or minor in the visual arts. It has the rigor of a college-level course, and all assignments require significant additional time/work beyond class time to complete. AP Art and Design is not based on a written exam; instead, students submit portfolios for evaluation to the College Board. Students create a portfolio of work to demonstrate inquiry through art and design and development of materials, processes, and ideas over the course of a year. Portfolios include works of art and design, process documentation, and written information about the work presented. In May, students submit portfolios for evaluation based on specific criteria, which include skillful synthesis of materials, processes, and ideas and sustained investigation through practice, experimentation, and revision.
World Languages

Students must earn a minimum of 10 credits in the same World Language (at the high school level) to fulfill MassCore and college admissions requirements. However, it is strongly recommended if a student is planning on attending college that the student continues to study the same language for all four years of high school. When a student enrolls in a World Language course, he or she can view the world with a broader mindset. The study of language and culture allows students to appreciate the rich diversity of the world in which they live and will work. Students who intend to pursue a language related career should study an additional language.

AMERICAN SIGN LANGUAGE

AMERICAN SIGN LANGUAGE 3
5 Credit Full Year course
Accelerated Course #: WL486
Recommended for grades 11-12
This online course, offered through Educere, LLC, is designed for students who have successfully completed American Sign Language 1 (ASL 1) and American Sign Language 2 (ASL 2). Eligible students must obtain approval and register through guidance. Students continue to acquire more complex features of grammar and lexical skills that will enable them to communicate with more fluency and competency in social, academic and professional situations within an authentic cultural context. Using the target language, students will debate and exchange information and opinions on a variety of topics and explore and discuss topics relevant to deafness today. Tests and quizzes are assessments used for receptive and expressive skill development. Research projects, papers, and presentations are assigned throughout the year. This course prepares students for further study and professional careers requiring competence in ASL and understanding of Deaf culture.

FRENCH

FRENCH 1
5 Credit Full Year course
College Prep Course #: WL410
Recommended for grades 9-12
This course is designed to introduce students to the French language and culture. Students practice vocabulary and grammar concepts in guided and structured exercises, both oral and written. In addition to homework assignments and class participation, student assessments include written and oral quizzes and tests, conversation, presentations and projects. The instructional pace is designed to develop students’ second language skills in order to prepare them for a successful transition to French II. Students are expected to use familiar vocabulary and expressions to communicate in French.

FRENCH 2
5 Credit Full Year course
College Prep Course #: WL420
Accelerated Course #: WL424
Recommended for grades 10-12
Students continue the development of communication skills in listening, reading, writing and speaking using practical and current vocabulary. New grammatical concepts focus on enhancing communication in everyday life. Students practice new vocabulary and grammar concepts through guided and structured exercises, both oral and written. Homework and classroom assignments include exercises designed to improve the students’ speaking, listening, reading and written competence while exploring the culture of several Francophone nations. In addition to homework and class participation, students’ assessments include written and oral quizzes, conversations and presentations, and projects focusing on unit objectives. Students are expected to use French to communicate with their teacher and their classmates.

FRENCH 3
5 Credit Full Year course
Accelerated Course #: WL430
Recommended for grades 11-12
Students who enroll in this course continue to develop second language proficiency in listening, speaking, reading, and writing while developing cultural sensitivity to the activities of French-speaking people throughout the world. Through group and pair activities, oral presentations, and guided writing activities, students use the skills they have learned to communicate in authentic, real-life situations. Assessment focuses on listening and speaking skills, and interaction in the target language with peers and the teacher. Students will begin to read adapted and original French literature to increase proficiency. Reading sélections include poetry and short stories from various Francophone authors.
**SPANISH**

**SPANISH 1**
5 Credit Full Year course

This course is intended for students who have never studied Spanish or who have studied another World Language. It is designed to introduce students to the Spanish language and culture. In this entry-level course, the emphasis is placed on the important role that Hispanics play in the United States today. Students practice vocabulary and grammar concepts in guided and structured exercises both oral and written. In addition to daily homework assignments and class participation, student assessments may include written and oral quizzes and tests, conversation, presentations, and projects. The goal of this course is to develop students’ second language skills to prepare them for a successful transition to Spanish II. Students are expected to use familiar vocabulary and expressions to communicate in the target language.

**SPANISH 2**
5 Credit Full Year course

Students who enroll in this course continue to develop their communication skills in listening, reading, writing and speaking by acquiring and using modern vocabulary. In this beginning level course, new grammatical concepts continue to focus on basic communication. Students participate in structured and guided exercises, both oral and written, to practice new vocabulary and grammatical concepts. Assessments, both daily and long-term, are designed to strengthen and improve language skills. A variety of assessments may include written and oral quizzes and tests, conversations, presentations and projects focusing on unit themes. Students are expected to use level-appropriate language to communicate.

**SPANISH 3**
5 Credit Full Year course

Students who enroll in this course begin to apply their skills in listening, speaking, reading, and writing while developing cultural sensitivity to the everyday activities of Spanish-speaking countries. Students improve their skills through individual, pair or group activities, conversations, presentations, and guided writing activities, to communicate in authentic, real-life situations. A variety of cultural materials supplement the curriculum. Assessments focus on listening, speaking, reading, and writing skills.

**SPANISH 4**
5 Credit Full Year course

Spanish is the primary language of instruction in this course. Discussions, note taking, writing samples, and extemporaneous conversations in Spanish are required. Students expand their vocabulary, participate in authentic oral/aural situations, and practice advanced grammatical concepts. Students read a variety of literature, which may include poetry, short stories, biographies, and legends. Listening comprehension activities, oral presentations, and writing assignments are some of the criteria used to assess a student’s progress. Effective communication is the major goal of this course. Reading Selections include *Leyendas Norteamericanas* and *Lazarillo de Tormes*.

**FRENCH 4**

Accelerated Course #: WL440
5 Credit Full Year course

Recommended for grade 12

This course offers students an in-depth study of contextual communication, grammar, culture, and literature. Students actively participate in the functional uses of the language by interacting with their peers and the teacher on a daily basis; by listening to native speakers of French; by reading authentic literature from the Francophone world; and by writing compositions and critiques. Students also study French cinema and music. This class is conducted mainly in French. Reading selections include various extracts of Francophone authors.
ADVANCED PLACEMENT SPANISH LANGUAGE AND CULTURE  AP® Course #: WL490
5 Credit Full Year course  Recommended for grades 11-12

Advanced Placement Courses provide an opportunity for students to experience a college course while still in high school. AP courses follow a syllabus that has been approved by the College Board, and teachers must receive specialized training to teach the courses. It is expected that students who take AP courses will also register for the national AP exam at their own expense. The AP Spanish Language class covers the equivalent of a third-year college-level course in advanced Spanish reading, writing, and conversation. It encompasses aural/oral skills, reading comprehension, grammar, and composition. Emphasizing the use of Spanish for active and effective communication, the students will have the following goals:

1) To comprehend formal and informal spoken Spanish
2) To express ideas orally with accuracy and fluency
3) To acquire vocabulary and to understand grammatical structures
4) To compose expository and creative passages
5) To read critically

Assessment is an ongoing process that focuses on the language skills evaluated on the AP Spanish Language test. Students will write essays, prepare speech samples and engage in listening and audiovisual comprehension activities.
Course Index

A

ACADEMIC ASSISTANCE, 36
ACCELERATED PROBABILITY AND STATISTICS, 22
ACCOUNTING 1, 10
ACTING: IMPROVISATION & MONOLOGUES, 23
ADVANCED BUSINESS LAW, 10
ADVANCED MEDIA PROJECTS, 39
ADVANCED PLACEMENT 2-D Art and Design, 40
ADVANCED PLACEMENT BIOLOGY, 27
ADVANCED PLACEMENT CALCULUS AB, 19
ADVANCED PLACEMENT CALCULUS BC, 19
ADVANCED PLACEMENT CHEMISTRY, 27
ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES, 13
ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMP, 17
ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE, 28
ADVANCED PLACEMENT LITERATURE AND COMP, 17
ADVANCED PLACEMENT PHYSICS 1, 28
ADVANCED PLACEMENT PHYSICS C: Mechanics, 28
ADVANCED PLACEMENT PROBABILITY AND STATISTICS, 20
ADVANCED PLACEMENT SPANISH LANGUAGE AND CULTURE, 43
ADVANCED PLACEMENT STUDIO ART – 3-D, 40
ADVANCED PLACEMENT U.S. HISTORY, 31
ADVANCED PLACEMENT® PSYCHOLOGY, 32
ADVANCED PLACEMENT® MACROECONOMICS, 32
ADVANCED PLACEMENT® MICROECONOMICS, 32
ALGEBRA 2, 20
ALGEBRA I, 20
ALGEBRA I / GEOMETRY, 20
ALGEBRA II / GEOMETRY, 21
AMERICAN CINEMA, 17
AMERICAN GOVERNMENT and POLITICS, 33
AMERICAN SIGN LANGUAGE 3, 41
ANATOMY AND PHYSIOLOGY, 29
ANATOMY: SYSTEMS, 29
ANIMAL BEHAVIOR, 29
ASTRONOMY, 29

B

BIOLOGY, 28
BUSINESS LAW, 11
BUSINESS MANAGEMENT, 10

C

CADD, 13
CALCULUS, 21
CERAMICS 2, 38

CERAMICS I, 37
CHAMBER CHOIR, 23
CHEMISTRY, 28
CIVIL ENGINEERING AND ARCHITECTURE, 13
CLASSICAL GUITAR, 23
COMPUTER SCIENCE, 13
CONCERT CHOIR, 23
CREATIVE WRITING, 17
CYBERSECURITY, 14

D

DRAFTING TECHNOLOGY AND DESIGN, 14
DRAWING & PAINTING 2, 38
DRAWING & PAINTING 3, 38
DRAWING & PAINTING I, 38

E

ECONOMICS, 33
ELECTRONIC APPLICATIONS, 14
ENGINEERING CAPSTONE, 14
ENGINEERING CONCEPTS, 14
ENGINEERING DESIGN, 14
ENGLISH LANGUAGE ARTS 12, 16
ENGLISH LANGUAGE ARTS 10, 16
ENGLISH LANGUAGE ARTS 11, 16
ENGLISH LANGUAGE ARTS 9, 16
ENGLISH LANGUAGE LEARNING 1 - Foundational, 36
ENGLISH LANGUAGE LEARNING 2 - Transitional, 36
ENVIRONMENTAL SCIENCE, 29
EXTERNSHIP, 36

F

FORENSIC SCIENCE, 30
FOUNDATIONS OF ART, 37
FOUNDATIONS OF GRAPHIC DESIGN, 38
FOUNDATIONS OF MEDIA PRODUCTION, 39
FRENCH 1, 41
FRENCH 2, 41
FRENCH 3, 41
FRENCH 4, 42
FUNDAMENTALS OF FITNESS, 25
FUTURE EDUCATORS, 17

G

GENETICS AND BIOTECHNOLOGY, 30
GEOMETRY, 21
GOTHIC LITERATURE, 18
GRAPHIC DESIGN 1, 39
GRAPHIC DESIGN 2, 39

PHYSICS, 29
PIANO 1, 24
PRE-CALCULUS / TRIGONOMETRY, 21
PRINCIPLES OF ENGINEERING, 15
PROBABILITY AND STATISTICS, 22

HISTORY OF ROCK and ROLL, 23
HISTORY THROUGH COMICS AND GRAPHIC NOVELS, 33

INTERNSHIP, 36

JAZZ STUDIES, 24
JUSTICE AND THE LAW, 33

LIFETIME FITNESS, 25

MARKETING, 11
MEDIA PRODUCTION 1, 39
MEDIA PRODUCTION 2, 39
MIND-BODY FITNESS, 26
MODERN READS, 18
MODERN WORLD HISTORY, 33
MUSIC THEORY, 24

PERCUSSION ENSEMBLE, 24
PERSONAL/GROUP FITNESS TRAINING, 26
PHILOSOPHY AND ETHICS, 18
PHOTOGRAPHY, 37

WELLNESS, 25
WIND SYMPHONY, 24
WORLD HISTORY 800-1814, 32
SCHOOL PROPERTY DISPOSAL

When schools have used books, equipment, or furniture for which there is no further foreseeable use, the Principal may request permission to dispose of same under the following guidelines:

1. The principal will submit an itemized list of materials to be discarded to the superintendent who will certify that these items are not needed by other schools or other town departments.

2. The list will be presented to the North Middlesex Regional School District School Committee, which will consider declaring the books, furniture or equipment surplus and grant permission for disposal as warranted.

3. Disposal of books will be conducted under the direction of the principal with the approval from the superintendent in one of the following ways, listed in order of preference:

   a. Obsolete library books may be offered free of charge to students.
   b. Sale to a used book company.
   c. By exchange for goods and services with any district Educational Collaborative or other school systems.
   d. Donation to non-profit private schools within the community.
   e. Donation to other schools or charitable organizations.
   f. Public book sale to students, parents, and taxpayers in the community.
   g. Disposal through waste removal if all other possible alternatives fail.
   h. Any unusable books shall be discarded through waste removal.

4. Equipment and furniture will be disposed of by the superintendent in one of the following ways listed:

   a. Publicly advertise, seeking bids for the entire lot of furniture and/or equipment. Sell to the highest bidder.
   b. By donation to town departments. All towns will be offered goods equally and distribution will be based on first come/first serve basis after official written notification to town officials.
   c. Establish a reasonable price for each piece of equipment or furniture and conduct a public sale.
   d. By exchange for goods and services with any district Educational Collaborative or other school district.
   e. By donation to non-profit private schools within the community.
f. By donation to other schools or charitable organizations.
g. By disposal through waste removal if all other possible alternatives fail.
h. Any unusable equipment/furniture shall be discarded through waste removal.

5. Items not covered above may come to the school committee for consideration.

Adopted by the School Committee:

Informational review: July 8, 2021
NMRSD first vote: Jul 19, 2021
NMRSD second vote:
INTERNET PUBLICATION

I. PURPOSE

The School District has established a district-wide web page that links users to web pages for the district's individual schools. The School District maintains these web pages for educational purposes only, in furtherance of the educational mission of the School District. All published pages and corresponding links to other sites must relate to the district's educational mission.

II. SUPERVISION AND APPROVAL OF WEB PAGES

The Superintendent (or their designee) may select the person or persons ("the Webmaster") responsible for overseeing the school district's web pages and maintaining the web pages in a manner consistent with this policy and the school district's Access to Digital Resources Policy. The Webmaster must approve all links from the district web pages to other sites on the Internet. The Webmaster will review the links to ensure that the links are related to the district's educational mission.

Staff members may publish web pages related to their class projects or courses on their school's web site. Staff members must submit their material to the Webmaster for approval before the material can be published. Staff members may not publish or link to personal web pages as part of the school district website.

Student or staff work (e.g. voice, likeness, quotes, written material, musical pieces and graphic or other artwork) may be published on the district's web pages, as detailed below. All work that is published will be accompanied by a copyright notice written by the Webmaster that prohibits copying the work without the written consent of the copyright holder.

III. CONTENT STANDARDS

All web page materials are expected to be accurate, grammatically correct and free of spelling errors. Student work may deviate from this standard depending upon the age and grade level of the student. Web pages should be well-organized and professional in appearance. Web pages must not contain copyrighted or trademarked material belonging to others unless written permission to display such material has been obtained from the owner and the owner is credited on the school's web page.

IV. SAFETY PRECAUTIONS

A. In general

Identifying information about students, such as first and last names, personal phone numbers or home addresses, will not be published. First names or first names and the first letter of the student's last name may be used where appropriate.

B. Student photographs

- Student photographs may be published only with the written consent of the student's parent or guardian.
- Student photographs will not be accompanied by identifying information about the student(s).
C. **Student work**

Student work, e.g. voice, likeness, quotes, written material, musical pieces, and graphic or other artwork, may be published only with the written consent of the student's parent or guardian.

D. **Staff photographs, identifying information and work**

- Photographs of staff members, accompanied by the staff member's full name, may be published only with the staff member's written consent.

- Staff work, e.g. voice, likeness, quotes, written material, musical pieces and graphic or other artwork, may be published only with the staff member's written consent.

**SOURCE:** MASC

**Adopted by the School Committee:**

Informational review: [Jun 22, 2021](#)

NMRSD first vote: July 19, 2021

NMRSD second vote:
ASSIGNMENT OF STUDENTS TO SCHOOLS

The NMRSD School Committee requires Elementary and Middle School students to attend school in the attendance area in which they reside.

For elementary schools, the attendance areas are as follows:

- Ashby: Ashby Elementary School
- Townsend: Spaulding Memorial School
- Pepperell: Varnum Brook Elementary School

For middle schools, the attendance areas are as follows:

- Ashby: Hawthorne Brook Middle School
- Townsend: Hawthorne Brook Middle School
- Pepperell: Nissitissit Middle School

Exceptions are as follows:

1. When a student is placed in an intradistrict special education program located outside his/her attendance area, the student’s sibling(s) shall be able to attend the same school provided there is overlap. Requests must be made directly to and approved by the Superintendent of Schools.

2. If the legal residence of a child changes from one attendance area (within the district) to another during the school year and the parents/guardians wish the child to remain in his former school, permission will not extend beyond the current school year.

3. At the sole discretion of the building principal and Superintendent, children of staff members who reside in the district may be permitted to attend the school where their parent is employed, provided class sizes are acceptable. This does not apply to substitute roles. The student would then be able to continue on in that attendance area.

4. In order to maintain a sound educational program with reasonable class sizes for the best economic advantage of member towns, the Superintendent of Schools may with a ⅔ vote of the entire school committee, reassign pupils between elementary and middle school facilities. The parents/guardians of the pupils considered for such an assignment shall be notified in advance in writing by the Superintendent of Schools. Once a pupil has been placed in a particular facility, the pupil shall remain at the facility through the grades available in the facility as long as the population of that facility remains within acceptable limits.
5. When there is a documented reason (i.e., medical, legal, etc.) School bus transportation will not be provided for students attending schools outside their attendance area unless they are enrolled in a special education program or a student’s attendance area is adjusted by the district.

6. Students are required to attend school in the attendance area in which they reside unless the Superintendent has granted special permission. The Superintendent will consider each intra-district transfer request individually and will approve or deny the request based on the specific circumstances related to that request. When reviewing the transfer request, the Superintendent will consider the total needs of the receiving school and the ability of the receiving school to meet the student’s needs.

The following conditions apply to all intra-district transfer requests unless overridden by the Superintendent:

- It is suggested that parents or legal guardians requesting an intra-district transfer for their child make the request in writing to the Superintendent of Schools no later than January 1 of the prior school year for which the transfer is requested.

- Intra-district transfer requests will be considered on a case-by-case basis (i.e., not first-come, first-served.)

- Intra-district transfer requests will only be considered when the receiving school has acceptable class sizes, which will be determined by the administration.

- Intra-district transfers expire once the student successfully meets the requirements of the school. Elementary intra-district transfers do not necessarily carry over to middle school if it is out of the student’s attendance area.

- Students not attending their home school via an intra-district transfer are not entitled to school bus transportation. The parent or legal guardian accepts responsibility for providing transportation to and from school. If space is available on an existing route, a transfer student may be allowed to ride the bus (this would be on a year to year basis); however, no special bus routing will be established.

- The Superintendent’s decision to approve or deny an intra-district request is final and is not subject to appeal.

LEGAL REFS.: M.G.L. 71:37C; 71:37D; 71:37I; 71:37J 603 CMR 17.00 603 CMR 26.00
CROSS REF.: JC, Attendance Areas Approved: March 25, 2019

Adopted by the NMRSD School Committee:

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NMRSD second vote: May 18, 2020

NMRSD Review: April 24, 2020

NMRSD Review: July 8, 2021

NMRSD first vote: July 19, 2021
NMRSD second vote: