



## **Monroe Public Schools**

375 Monroe Turnpike  
Monroe, Connecticut 06468

**WEDNESDAY, DECEMBER 4, 2013  
MASUK HIGH SCHOOL  
LIBRARY/MEDIA CENTER  
1014 MONROE TURNPIKE  
MONROE, CONNECTICUT 06468**

### **CURRICULUM COUNCIL AGENDA**

**4:00 P.M.**

#### **OLD BUSINESS**

- I. APPROVAL OF THE MINUTES FROM THE NOVEMBER 6, 2013 MEETING
- II. FORENSICS COURSE UPDATE - JAMES STOELZEL/DIANE GABER

#### **NEW BUSINESS**

- I. COURSE REVISION OF AP PHYSICS 1/UCT – JAMES STOELZEL
- II. COURSE REVISION OF PHYSICS 1 – JAMES STOELZEL

*Next meeting date ~ Wednesday, February 5, 2014*



Monroe Board of Education  
Curriculum Council Committee  
November 6, 2013  
4:00 PM  
Masuk High School

*Meeting Minutes*

The meeting was called to order at 4:00 p.m. by Sheila Casinelli, Curriculum Council Co-Chair.

Those in attendance included: Jim Agostine, John Battista, Sheila Casinelli, Kay Moser, Joe Kobza, Mark Schwarz, Jack Ceccolini, Laura Maher, Debbie Kovachi, Bruce Lazar, Cindy Brooker, Debbie Walls, Lisa Peznowski, Michael Crowley, Kevin Welch, Jim Stoelzel, Ian Lowell, Ann Odoy, Bill McDonough, Susan Russell, Jamie Sherry, John Biase, Laura Lawlor, Mike Rinn, Sean Serafino, Elisa Rubis, Kelly Sherry, and Sue Brown.

Old Business

I. *Approval of October 2, 2013 Minutes*

Motion: Jamie Sherry

Motion to approve minutes from the Oct. 2, 2013 Curriculum Council meeting.

Second: Joe Kobza

Vote: Unanimous

New Business

PROPOSALS

I. COURSE REVISION OF ENGLISH 11 AMERICAN LITERATURE – MICHAEL CROWELY

Michael Crowley, Secondary Instructional Leader for English Language Arts, shared a proposal for revising the Grade 11 English American Literature Course. This curriculum will provide a survey course in American Literature for all grade 11 students. In the past, there have been five different levels taught in this grade (English 3, English 11, American Lit -- CP, American Lit -- Honors, AP English Language and Composition). This proposal will condense the levels to three (American Lit -- CP, American Lit -- Honors, AP English Language and Composition). This revision reflects recommendations provided by the NEASC visiting committee and the requirements of the Common Core State Standards. English 11 -- American Literature provides students with an overview of the major movements in our country's literary history. By looking deeply at various pieces of literature and primary documents, students will develop their critical reading, writing, researching, speaking and listening skills. In addition, students will continue in their vocabulary acquisition and their refinement of standard written and spoken English. This revision continues our NEASC-recommended compression of academic levels and addresses the increased rigor of the Common Core Standards and SBAC. Historically, students at Masuk have had difficulty in the Critical Reading and Writing portions of the SAT and the revision of the curriculum focuses deeply on the skills required for greater success on these assessments. Next steps will be to examine grade 12 electives with a variety of semester courses.

Motion: Jim Agostine  
Motion to endorse the revised course of English 11 - American Literature.  
Second: Laura Lawlor  
Vote: Unanimous

III. COURSE REVISION MATH PRE-ALGEBRA – KEVIN WELCH

Kevin Welch, Secondary Instructional Leader for Mathematics, and Susan Russell, STEM math teacher, shared a new textbook proposal and course revision for Pre-Algebra. The Pre-Algebra course will cover four domains of the Common Core. Number Quantity - Analyzing Proportional Relationships; Performing Real Number Operations; Using Radicals and Integer Exponents, Algebra - Generating Equivalent Expressions; Connecting Proportional Relationships and Lines; Solving Problems Using Linear Equations and Inequalities, Geometry - Understanding Geometric Relationships and Similarity; Solving Problems Involving Angles, Surface Area and Volume, Statistics and Probability - Analyzing and Comparing Populations; Finding Probabilities of Events. The Big Ideas - Accelerated textbook is aligned with the Common Core Standards. It is designed to prepare the Pre-Algebra students for an Algebra I course. The book uses a balanced approach to instruction that includes abstract thought and reasoning as well as inquiry based problems. The Big Ideas - Accelerated textbook includes relevant application problems that provide depth and rigor and meets the challenge of the new Smarter Balanced assessments. The textbook comes with an on-line component. This enables the students to reinforce their learning with tutorials, enrichment activities and skills review. "Students are subtly introduced to "Habits of Mind" that help them internalize concepts for a greater depth of understanding." (Big Ideas Math pg. iii).

Motion: Jim Agostine  
Motion to endorse the revised course and textbook for Pre-Algebra.  
Second: Michael Rinn  
Vote: Unanimous

IV. COURSE REVISION OF ROBOTICS 1, ROBOTICS 2, PROGRAMMING 1, VIDEO GAME DESIGN 1 AND VIDEO GAME DESIGN 2 - BILL MCDONOUGH

Bill McDonough, CTE teacher at Masuk, shared course revisions for multiple courses. These courses were previously half-year courses but demand and scheduling has led us to making a change at this point.

Robotics 1

The course would teach students to build robots and program them in two programming languages. This yearlong course will challenge students to problem solve both in designing robots and using programming languages to have them perform tasks. The languages would be compared to show students their strengths and weakness within their use with the robots. Students would experience a drag and drop interface programming The Lego mind storm software and line coding from Robot C.

## Robotics 2

The course would teach students to build robots and program them in multiple programming languages. This yearlong course will challenge students to problem solve both in designing robots and using programming languages to have them perform tasks. The languages would be compared to show students their strengths and weakness within their use with the robots. Students would experience a drag and drop interface Easy C software and line coding from Robot C.

## Programming 1

The course would teach students to program in two programming languages. This yearlong course will challenge students to problem solve in both languages. The languages would be compared to show students their strengths and weakness within real world applications. Students would experience GUI interface programming in Visual Basic and Console programming From C++.

## Video Game Design 1

The course would teach students the concepts of computer science, scripting languages, and game design in both linear and video games. This yearlong course will challenge students to problem solve across many platforms and modes. Students will create both linear games (Board, Card, tabletop games) and video games.

## Video Game Design 2

The course would teach students the concepts of computer science, scripting languages, and game design in both linear and video games. This yearlong course will challenge students to problem solve across many platforms and modes. Students will create both linear games (Board, Card, tabletop games) and video games.

Motion: Jim Agostine  
Motion to endorse all five CTE proposals.  
Second: Susan Russell  
Vote: Unanimous

## II. NWEA -- JOHN BATTISTA

John Battista, Assistant Superintendent, shared with the committee that we are exploring a new on-line assessment. Northwest Evaluation Association (NWEA) introduced the nation's first computer adaptive educational assessment in 1985 - but had roots going back to the 1970s, when paper-based testing ruled. That's when NWEA founders Allan Olson, George Ingebo, and Vic Doherty decided to refine the measurement of student growth through a research-based system that could measure every student's growth and progress. Whether student performance was above or below grade-level abilities, the original NWEA assessments gave teachers data they could use to inform classroom instruction. This continues today as NWEA has aligned its questions to the CCSS. A sales presentation will be happening in the coming weeks. Budget planning would have us eliminating other assessments in order to purchase NWEA if we decide to go that route.

The meeting adjourned at 5:05 pm.

# MONROE CURRICULUM COUNCIL MONROE BOARD OF EDUCATION

Monroe, Connecticut

## Curriculum Proposal Form

Course Title	AP Physics I/UCT		
Subject Area	Science	Grade Span	11-12
Proposal Author(s)	Jim Stoelzel/Peter Schmitt	Date	12/01/13
Course of Study	New	xx	Revised
	Semester		Full Year
			xx

*Respond to the following questions as they apply to your proposal.*

### Part A: Course Information

#### Rationale for Requested Curriculum Work

This course replaces 6810, Physics I (Honors) with a first-year Advanced Placement course that also meets the requirements for the UCONN Early College Experience credit, allowing our students greater opportunity to earn college credits while at Masuk.

Provide a narrative description of the course.

AP Physics I/UCT is an algebra-based equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits. The pace and workload of this course is rigorous. This course has been designed to prepare students for the AP Physics I Exam. Students who satisfactorily complete this course may receive up to 4 college credits issued by the University of Connecticut for their Physics 1201 course.

Describe any prerequisites for taking this course and how this course fits in a sequence.

A strong background in mathematics is required, especially as as related to algebra, trigonometry, and geometry. Prerequisites: B or higher in 6310 (Chemistry I - H) and 5810 (Pre-Calculus - H) or 5820 (Pre-Calculus), which may be taken concurrently.

If this is a revision to a course, what data (quantitative/qualitative) contributed to the need for a revision?

Current enrollment in AP Physics B = 23  
Project enrollment based on Physics I-H = 85  
Also allows many students to continue on to AP Physics 2 during senior year

Can the existing school facility/schedule accommodate this change? Require any additional staffing?

No change to facility or staffing

In developing this course, please cite the research and sources consulted in designing this proposal.

AP website - Advances in AP <http://advancesinap.collegeboard.org/node/3683>  
UCONN ECE site for PHYS 1201 course description  
<http://ece.uconn.edu/courses/subj/phys.php>

## Part B: How does your Curriculum Proposal meet the Curriculum Philosophy of the district?

*Our curriculum supports the Monroe Public Schools mission by ensuring that instruction is engaging, rigorous, relevant, and inquiry based while meeting the needs of the 21st century learner. All students, upon graduation, will be college and career ready, prepared to succeed in a diverse global community.*

Provide evidence for each of the following:

### Rigorous

This course significantly increases the opportunity for Masuk students to earn college-level Science credit, as early as sophomore year, instead of senior year. Students use a college-level textbook to investigate topics in Physics requiring advanced problem-solving and mathematical skills.

### Relevant

Recent changes to the AP Science courses reflect greater emphasis on connection to real-world applications of the Physics concepts studied.

### Inquiry based

College Board strongly recommends the Physics B course include a hands-on laboratory component comparable to introductory college-level physics laboratories, with a minimum of 12 student-conducted laboratory investigations representing a variety of topics covered in the course. Each student should complete a lab notebook or portfolio of lab reports.

### Meeting the needs of the 21st century learner

This curriculum meets the needs of the 21st century learner by requiring students to be creative thinkers who can effectively communicate and collaborate with one another. Each unit incorporate the use of technology for analysis and evaluation of solutions.

### Preparing students to be college and career ready

This course will be conducted at a college-level, with significant inputs from the University of Connecticut to ensure this fidelity to the college experience. This course directly supports a number of college majors in science, engineering, math, and other areas of study.

### Part C: Curriculum Writing

If this proposal is approved, you will be expected to map the units of study that will be covered in this course of study.

Recommended Hours	Requested Hours
<b>New Course</b> – Semester approximately 20 hours Year Course approximately 40 hours <b>Revision</b> – Semester approximately 15 hours Year Course approximately 20 hours	Total Hours: 40 hours

### Part D: Professional Development

Please describe any professional development activities needed to implement this curriculum. Do not count curriculum writing in this section.

Activity	Requested Hours
AP Physics I course at Taft for 2 Physics teachers (1 week)	\$1800

### Part E: Approval (Signatures required)

I have reviewed this course proposal and I am requesting approval by the Monroe Board of Education.

Title	Signature	Date
Recommended by:	Peter Schmitt	12/01/13
Department Chair:	Jim Stoelzel	12/01/13
Principal/Director:	Joe Kobza	12/01/13
Director of Instruction:	Sheila Casinelli	12/01/13
Assistant Superintendent:	John Battista	12/01/13
Superintendent:		
Board of Education		

**MONROE CURRICULUM COUNCIL  
MONROE BOARD OF EDUCATION**

Monroe, Connecticut

**Instructional Materials/Textbook Proposal Form**

Course Title	AP Physics I/UCT ECE		
Subject Area	Science	Grade Span	11-12
Proposal Author(s)	Jim Stoelzel/Peter Schmitt	Date	12/01/13
Course of Study	New	xx	Revised
	Semester		Full Year
			xx

*Respond to the following questions as they apply to your proposal.*

**Part A: Textbook Proposal**

Textbook Title:	College Physics.		
Author/Editor:	Wilson, J. and Buffa, A.	Copyright Date:	1999 (latest 2009)
Publisher:	<b>Addison-Wesley</b>	Latest Revision Date:	<b>4th (latest 7th)</b>
Recommended for use in grade(s)	<b>10-12</b>	High/Avg/Low level:	<b>High</b>
Subject	Science		
Course Title:	AP Physics I/UCT		

**Part B: Textbook Information**

Rationale for Requested Textbook

We currently have enough copies of the 4th edition to run the course with expected enrollment. This text is on the AP Physics B approved text list.

Why is this textbook needed? Include an explanation of how the text relates to the proposed course of study?

No new text planned for purchase.



Identify other textbooks that were considered, and include the publishers/copyright.

Cutnell, John D. and Kenneth Johnson. Physics. Hoboken, NJ: Wiley. (9th ed, 2012) \$212  
 Gianbalista, A., Richardson, B. and Richardson, R.C. College Physics. Boston, MA: McGraw-Hill. (2012) \$151  
 Giancoli, D.C. Physics: Principles with Applications. Englewood Cliffs, NJ: Prentice Hall. (7th ed, 2012) \$219  
 Knight, R. College Physics: A Strategic Approach. Boston, MA: Addison-Wesley/Pearson. (2nd ed, 2012) \$197  
 Serway, R. A., Faugh, J. and Vuille, C. College Physics. Boston, MA: Cengage Wodsworth. (9th ed, 2011) \$154  
 Walker, J.S. Physics. Volumes 1 and 2. Upper Saddle River, NJ: Prentice Hall. (4th ed, 2009) \$192  
 \*\* Wilson, J. and Buffa, A. College Physics. San Francisco, CA: Addison-Wesley. (7th ed, 2009) \$212 if older edition replced

Why was the recommended textbook chosen?

Excellent range of problems, teacher familiarity with this text, minimize cost by using 4th edition (2004)

### Part C: Funding

Funding for this course should be included in the budget for the implementation year. Failure to include the funding may result in a delay in implementation. Courses added to program of studies booklets prior to approval by the Board of Education should include "pending BOE approval" alongside the course title.

Budget Request:

Item	Quantity	Unit Price	Extended Price
Textbooks			
Workbooks			
Software/Online textbook			
Equipment/Hardware*	1 (lab update)	1000	1000
Other supplies			
		Total	

\*Describe Equipment/Hardware

Additional AP lab supplies (1 section to 3 sections) - kinematic carts, force plates, photogates, Atwood machines, calorimeters, and others

### Part D: Approval (Signatures required)

I have reviewed this course proposal and I am requesting approval by the Monroe Board of Education.

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Recommended by:	Peter Schmitt	12/01/13
Department Chair:	Jim Stoelzel	12/01/13
Principal/Director:	Joe Kobza	12/01/13
Director of Instruction:	Sheila Casinelli	12/01/13
Assistant Superintendent:	John Battista	12/01/13
Superintendent:		
Board of Education		

**MONROE CURRICULUM COUNCIL  
MONROE BOARD OF EDUCATION**

Monroe, Connecticut

**Curriculum Proposal Form**

Course Title	Physics I		
Subject Area	Science	Grade Span	12
Proposal Author(s)	Jim Stoelzel/Peter Schmitt	Date	12/01/13
Course of Study	New	xx	Revised
	Semester		Full Year xx

*Respond to the following questions as they apply to your proposal.*

**Part A: Course Information**

**Rationale for Requested Curriculum Work**

This course is similar to 6820, Physics I, geared for students who plan to major in health or other science fields not requiring mathematically-rigorous Physics, but need Physics for college admission.

Provide a narrative description of the course.

Physics I is designed principally for a serious-minded, college bound student. Emphasis is focused on the conceptual understanding of classical physics as well as laboratory techniques. This course gives the student a good background in the theory of physics and is designed to develop a sound scientific attitude.

Describe any prerequisites for taking this course and how this course fits in a sequence.

A good background in mathematics is required, especially as as related to algebra, trigonometry, and geometry.  
Prerequisite: C or higher in 6320 or 6330 (Chemistry I) and (math class???)

If this is a revision to a course, what data (quantitative/qualitative) contributed to the need for a revision?

Majority of current enrollment in Physics I with grade <=C and Math <= C: 13  
A portion of students who dropped Physics I: 18

Can the existing school facility/schedule accommodate this change? Require any additional staffing?

No change to facility or staffing

In developing this course, please cite the research and sources consulted in designing this proposal.

Feedback from Guidance on need for another college-prep level course

## Part B: How does your Curriculum Proposal meet the Curriculum Philosophy of the district?

*Our curriculum supports the Monroe Public Schools mission by ensuring that instruction is engaging, rigorous, relevant, and inquiry based while meeting the needs of the 21st century learner. All students, upon graduation, will be college and career ready, prepared to succeed in a diverse global community.*

Provide evidence for each of the following:

### Rigorous

This course adds an additional opportunity for Masuk students to take college-prep Science credit during their senior year. Student use a college-preparatory textbook to investigate topics in Physics requiring critical thinking and advanced problem-solving skills without relying on advanced mathematics .

### Relevant

Course will allow greater emphasis on inquiry and real-world applications of the Physics concepts studied, reflecting the pedagogical shift occurring at post-secondary schools today.

### Inquiry based

Course will include a hands-on laboratory component similar to introductory college-level physics laboratories. Each student should complete a lab notebook or portfolio of lab reports.

### Meeting the needs of the 21st century learner

This curriculum meets the needs of the 21st century learner by requiring students to be creative thinkers who can effectively communicate and collaborate with one another. Each unit incorporate the use of technology for analysis, research and evaluation of solutions.

### Preparing students to be college and career ready

This course directly supports a number of college majors in science, health services and other areas of study.

### Part C: Curriculum Writing

If this proposal is approved, you will be expected to map the units of study that will be covered in this course of study.

Recommended Hours	Requested Hours
<b>New Course</b> – Semester approximately 20 hours Year Course approximately 40 hours <b>Revision</b> – Semester approximately 15 hours Year Course approximately 20 hours	Total Hours: 20 hours

### Part D: Professional Development

Please describe any professional development activities needed to implement this curriculum. Do not count curriculum writing in this section.

Activity	Requested Hours
None	

### Part E: Approval (Signatures required)

I have reviewed this course proposal and I am requesting approval by the Monroe Board of Education.

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**MONROE CURRICULUM COUNCIL  
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**Instructional Materials/Textbook Proposal Form**

Course Title	Physics I		
Subject Area	Science	Grade Span	12
Proposal Author(s)	Jim Stoelzel/Peter Schmitt	Date	12/01/13
Course of Study	New	xx	Revised
	Semester		Full Year
			xx

*Respond to the following questions as they apply to your proposal.*

**Part A: Textbook Proposal**

Textbook Title:	Physics: Principles and Problems		
Author/Editor:	Paul Zitzewitz	Copyright Date:	2004
Publisher:	<b>Glencoe</b>	Latest Revision Date:	<b>2004</b>
Recommended for use in grade(s)	<b>9-12</b>	High/Avg/Low level:	<b>Ave</b>
Subject	Science		
Course Title:	Physics I		

**Part B: Textbook Information**

**Rationale for Requested Textbook**

Same textbook currently used in Physics I (6820) - no additional copies needed
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Why is this textbook needed? Include an explanation of how the text relates to the proposed course of study?

N/A
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Identify other textbooks that were considered, and include the publishers/copyright.

Conceptual Physics by Paul Hewitt, Addison-Wellsey, 11th ed, 2009 (\$125 + \$50 for lab manual)

Why was the recommended textbook chosen?

Minimize cost

### Part C: Funding

Funding for this course should be included in the budget for the implementation year. Failure to include the funding may result in a delay in implementation. Courses added to program of studies booklets prior to approval by the Board of Education should include "pending BOE approval" alongside the course title.

Budget Request:

Item	Quantity	Unit Price	Extended Price
Textbooks			
Workbooks			
Software/Online textbook			
Equipment/Hardware*			
Other supplies			
		Total	0

\*Describe Equipment/Hardware

N/A

### Part D: Approval (Signatures required)

I have reviewed this course proposal and I am requesting approval by the Monroe Board of Education.

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