

## WESTPORT BOARD OF EDUCATION

### \*AGENDA

(Agenda Subject to Modification in Accordance with Law)

#### **PUBLIC SESSION/PLEDGE OF ALLEGIANCE:**

7:30 p.m., Staples High School, Cafeteria B (Room 301)

#### **ANNOUNCEMENTS FROM BOARD AND ADMINISTRATION**

#### **PUBLIC QUESTIONS/COMMENTS ON NON-AGENDA ITEMS (15 MINUTES)**

**MINUTES:** October 20, 2014

#### **PRESENTATION/DISCUSSION/ACTION:**

1. National Executive Service Corps Protocol (Encl.) John Scott  
 Attending: Shelley Michelson, Debbie Brennan, Bill Brautigam

#### **DISCUSSION:**

1. Curriculum and Instruction
  - 1.a. Course Offerings and Sequencing: Grades 6-12 (Encl.) Mr. D'Amico
  - 1.b. Integration of S.T.E.M. with the Arts
  - 1.c. Comparative Analysis of DRG A Courses, Grades 6-12
  - 1.d. Relation to Economic Trends/Local Opportunities
2. New Course Proposals: Staples High School (Encl.) Mr. D'Amico

#### **DISCUSSION/ACTION:**

1. Policy P3320: Purchasing (Encl.) Dr. Landon
2. Policy P3160: Transfer of Funds (Encl.) Dr. Landon
3. Acceptance of Gifts
  - 3.a. Westport Basketball Association (Encl.) Dr. Landon

#### **ADJOURNMENT**

\*A 2/3 vote is required to go to executive session, to add a topic to the agenda of a regular meeting, or to start a new topic after 10:30 p.m. The meeting can also be viewed on cable TV on channel 78; AT&T channel 99 and by video stream @[www.westport.k12.ct.us](http://www.westport.k12.ct.us)

##### PUBLIC PARTICIPATION WELCOME USING THE FOLLOWING GUIDELINES:

- Comment on non-agenda topics will occur during the first 15 minutes *except* when staff or guest presentations are scheduled.
- Board will not engage in dialogue on non-agenda items.
- Public may speak as agenda topics come up for discussion or information.
- Speakers on non-agenda items are limited to 2 minutes each, except by prior arrangement with chair.
- Speakers on agenda items are limited to 3 minutes each, except by prior arrangement with chair.
- Speakers must give name and use microphone.
- Responses to questions may be deferred if answers not immediately available.
- Public comment is normally not invited for topics listed for action after having been publicly discussed at one or more meetings.

# WESTPORT PUBLIC SCHOOLS

---

**ELLIOTT LANDON**  
*Superintendent of Schools*

110 MYRTLE AVENUE  
WESTPORT, CONNECTICUT 06880  
TELEPHONE: (203) 341-1010  
FAX: (203) 341-1029

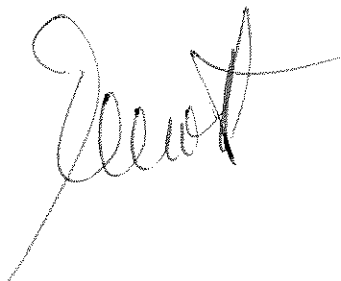
To: Members of the Board of Education  
From: Elliott Landon  
Subject: National Executive Service Corps Protocol  
Date: November 10, 2014

The Steering Committee of the Westport Public Schools that has been appointed to serve as a conduit between the Board of Education and representatives of the National Executive Service Corps (NESC) on the matter of the NESC Productivity and Efficiency Study has, as the request of NESC, met and developed a listing of "Priorities Driving the Mission of the Westport Public schools."

It is the listing of these priorities that will govern the nature of the discussions the full Board of Education will be having with the NESC representatives who will be present at the meeting of November 10. Subsequent to those discussions, it is the request of the Steering Committee and the NESC representatives that the Board of Education vote to approve the document entitled, "Priorities Driving the Mission of the Westport Public Schools."

## **ADMINISTRATIVE RECOMMENDATION**

**Be It Resolved, That upon the recommendation of the Superintendent of Schools, the document entitled, "Priorities Driving the Mission of the Westport Public Schools," be approved for use in the deliberations concerning the recommendations of the National Executive Service Corps with regard to its Productivity and Efficiency Study for the Westport Public Schools.**



**\*PRIORITIES DRIVING THE MISSION OF THE WESTPORT PUBLIC SCHOOLS**

- 1. Exceptional Academic Programming That Is Diversified and Differentiated to Meet the Needs of all Students**
- 2. A Broad Array of Supportive Social and Emotional Programs for All Students That Are Developmentally Appropriate**
- 3. Supervision, Evaluation, Recruitment and Retention of the Highest Quality of Staff**
- 4. Impact on Families**
- 5. Curricular, Instructional and Non-Instructional Program Improvements through Targeted Professional Development**
- 6. Robust Interscholastic, Intramural and Extracurricular Activities**
- 7. Safety and Security for Students and Staff**
- 8. Maintenance of Buildings and Grounds**
- 9. Impact on the Community**

\*Prepared by the Steering Committee of the Westport Public Schools: Brett Aronow, Marge Cion, Karen Kleine, Elio Longo and Elliott Landon



*James D'Amico*  
Director of Secondary Education

---

TO: Elliott Landon  
FROM: James D'Amico <sup>JD</sup>  
SUBJECT: Secondary Curriculum Report: Course Offerings and Comparisons  
DATE: November 10, 2014

Over the past several years, we have continued to make program improvements and additions at the middle and high school level. This progress report is designed to allow us the opportunity to examine our own offerings measured against our goals as a district, as well as to compare our offerings with our DRG A counterparts.

I would like to thank my curriculum administrator colleagues from the other DRG A school districts who assisted in the construction of this presentation, and with whom I will share this report. Just as we look to build strategic collaboration skills in our students and among our faculty and staff, I believe we will only get stronger as a district if we seek to develop more collaborative relationships with other school districts.

Our middle school curriculum is comprehensive, and offers comparable offerings to other middle schools in our DRG. While there are some slight differences in scheduling, instructional time, and in some special course offerings, we are offering students the chance to experience learning in multiple disciplines, preparing them for the rich program offerings at Staples High School. As part of our continuous curriculum improvement, we will continue to examine ways that we can differentiate instruction across the curriculum, and support all students' learning needs. As we refine our learning expectations through the creation of a 5th Domain of the Westport 2025 Lens, we will use that framework to measure the priorities of any new program offerings, and to guide our thinking on how we structure the middle schools in Westport.

Our Staples High School program is comprehensive and rigorous, and currently exceeds the requirements of the State of Connecticut. It is also interesting to note that we have the highest credit requirement of any other high school in DRG A. As you have seen previously in the standardized testing report and can see in our course catalog, Staples High School is among the finest schools in our state and the nation in preparing students for multiple paths beyond graduation.

Our continued commitment to student choice and rich elective offerings has positioned us well in the context of STEAM (Science, Technology, Engineering, Arts, and Mathematics) programming. Our Science and Math offerings are second to none, and our Technology, Engineering, and Arts programs are varied, and by their nature integrative, which is a key not only to STEAM, but to our own high expectations for student learning.

The report on our high school programs should be viewed with the understanding that graduation requirements will shift for the Class of 2020, in accordance with Connecticut General Statutes (§ 10-221a (2012)). While we have not developed a proposal for alterations to Staples' programs yet, all of the secondary curriculum leaders and administrators are well aware of the changes, and are currently strategizing about the effects of these changes, as well as imagining possibilities for the future.

We have a history of capitalizing on school-community partnerships with our programs, including the Staples Spectacular Student Challenge, the senior internship program, students who participate and engage with the community through the Maker Faire and robotics teams, and community connections to our PBL projects. I would suggest however, that this is an area that we should continue to explore, and that can be strengthened in our program.

# Secondary Curriculum Offerings and Sequencing

# Course Sequencing- Middle School

- Westport's offerings are comparable to other middle schools in our DRG
- Some key differences:
  - Multiple Language Arts blocks
  - Computer courses
  - Elective offering
  - Approaches to Design/Engineering

# Grade 6 Sequencing

6	Westport	Darien	New Canaan	Weston	Wilton
<b>ELA</b>	ELA 6	*10 periods per week	Grade 6 LA	ELA 6	ELA 6 R/W Workshop
<b>Math</b>	Math 6 Math 6 High	Math 6	Math 6 Math 6/7/8 (2 years) Math 7 Math 7/8	In-Focus 6-1 In-Focus 6-2 Pre-Algebra	Math 6 Math 6 Adv.
<b>Science</b>	Science 6	Science 6	Science 6	Science 6	Science 6
<b>Social Studies</b>	SS 6	SS 6	SS 6	SS 6	SS 6
<b>World Languages</b>	French Spanish Mandarin	French Spanish	French Spanish Latin Mandarin	French Spanish	French Spanish
<b>Technology Ed./ Engineering</b>	Design and Engineering 6	No	No	Robotics	I-STEM (design/eng/ prob solv)
<b>Computer Applications/ Skills</b>	No (Integrated)	Intro to Computers	Integrated through research program, embedded through core classes	No	No
<b>Family/Consumer Science</b>	No	No	No	No	Yes
<b>Art</b>	Yes		Yes- 46 min 2 x week	Yes	Yes
<b>Music</b>	General Music & Tech Band Chorus Strings	Instrumental Chorus Band Orchestra Music Expbration	1x week lessons groups 2x week ensemble rehearsals Orchestra Band Chorus General Music	Guitar Band Chorus Orchestra	General Band Chorus Orchestra
<b>Health/Wellness</b>	Yes	Yes	Yes- 18 classes per year	Yes	Yes
<b>Physical Ed.</b>	Yes	Yes	Yes- 2 x week	Yes	Yes



# Grade 7 Sequencing

7	Westport	Darien	New Canaan	Weston	Wilton
<b>ELA</b>	ELA 7	Eng. 7	Grade 7 LA	ELA 7	ELA 7 R/W Workshop
<b>Math</b>	Math 7 Pre-Algebra Algebra 1H	Math 7 Algebra I	Math 7 Math 6/7/8 (2 years) Math 8 Algebra	In-Focus 7-1 In-Focus 7-2 Algebra I	Math 7 Math 7 Adv. Algebra
<b>Science</b>	Science 7	Science 7	Science 7	Science 7	Science 7
<b>Social Studies</b>	SS 7	SS 7	SS 7	SS 7	SS 7
<b>World Languages</b>	French Spanish Mandarin	French Spanish	French Spanish Latin Mandarin	French Spanish	French Spanish
<b>Technology Ed./ Engineering</b>	Design and Engineering 7	Materials Processing	No	Tech "Stations"	I-STEM
<b>Computer Applications/Skills</b>	No	Keyboarding	Integrated through research program, embedded through core classes	Yes	No
<b>Family/Consumer Science</b>	No	Yes	No	Yes	Yes
<b>Art</b>	Yes		2 x week	Yes	Yes
<b>Music</b>	Music & Tech Band Chorus Strings	Instrumental Chorus Band Wind Ens. Orchestra Music Exploration	1x week lessons groups 2x week ensemble rehearsals Orchestra Band Chorus General Music	Piano Lab Band Chorus Orchestra	General Band Chorus Orchestra
<b>Health/Wellness</b>	Yes		Yes- 18 classes per year	Yes	Yes
<b>Physical Ed.</b>	Yes	Yes	Yes- 2 x week	Yes	Yes

# Grade 8 Sequencing

8	Westport	Darien	New Canaan	Weston	Wilton
<b>ELA</b>	ELA 8	Eng 8	Grade 8/LA	ELA 8	ELA 8 R/W Workshop
<b>Math</b>	Pre-Algebra Algebra 1 Algebra 1 H Geometry H	Pre-Algebra Algebra 1	Math 8 Algebra Geometry	Grade 8 Algebra 1 Geometry	Math 8 Algebra Geometry
<b>Science</b>	Science 8	Science 8	Science 8	Science 8	Science 8
<b>Social Studies</b>	SS 8	SS 8	SS 8	SS 8	SS 8
<b>World Languages</b>	French Spanish Mandarin	French Spanish	46 min daily of either: French Spanish Latin Mandarin	French Spanish	French Spanish
<b>Technology Ed./ Engineering</b>	Design and Engineering 8	Engineering	46 min. daily of Project Lead the Way Gr. 8 only as an extended day core class	Tech "Stations"	I-STEM
<b>Computer Applications/Skills</b>	No	Windows	Integrated through our research program embedded through core classes	Yes	No
<b>Family/Consumer Science</b>	No	Yes	No	Yes	Yes
<b>Art</b>	Yes		2 x week	Yes	Yes
<b>Music</b>	Music & Tech Band Chorus Strings	Instrumental Chorus Band Wind Ens. Orchestra Music Exprobration	1x week lessons groups 2x week ensemble rehearsals Orchestra Band Chorus General Music	Music Tech. Band Chorus Orchestra	General Band Chorus Orchestra
<b>Health/Wellness</b>	Yes		18 classes a year, every grade	Yes	Yes
<b>Physical Ed.</b>	Yes	Yes	2xweek	Yes	Yes

# DRG A Graduation Requirement Comparison

	<u>Darien</u>	<u>New Canaan</u>	<u>Joel Barlow</u>	<u>Ridgefield</u>	<u>Westport</u>	<u>Weston</u>	<u>Wilton</u>	<u>State Requirements</u>
<b>Total Graduation Requirements</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>21</b>	<b>25</b>	<b>24</b>	<b>23.5</b>	<b>20</b>
English	4	4	4	4	4	4	4	4
Math	3	3	3	3	3	3	3	3
Science	2	2	3	3	2	3	2	2
Social Studies	3.5	3	3	3.5	3.5	3	3	3
Fine Arts	1	2.5	2	1	1.5	1	1	1
Health/PE	1	2	2.5	1.5	3	2	2.5	1
Electives	7.5	6.5	6.5	4	6	7	6	6
World Languages	0	0	0	1	2	0	0	0
Computer (Technology) or Applied Arts	0	0	0	0	0	1	1	1
Humanities							1	

\* State of CT requires 1 total credit in the Arts or Vocational Education

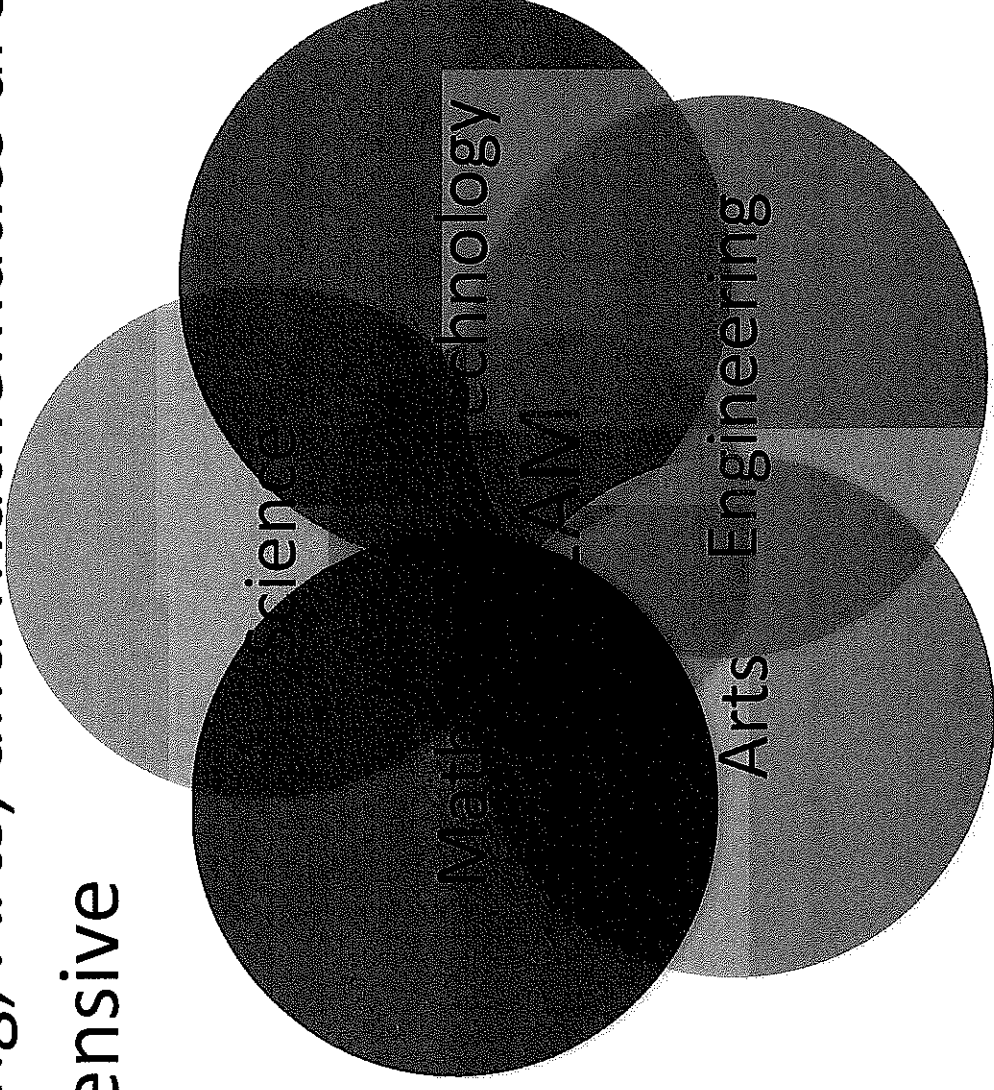
# Connecticut Graduation Requirements:

## Class of 2020

<b>Humanities</b>	
English	4
Social Studies	3
Fine Arts	1
Humanities Elective	1
<b>STEM</b>	
Math	4
Science	3
STEM Elective	1
<b>Career and Life Skills</b>	
Physical Education	1
Health and Safety	0.5
Career and Life Skills Electives	2
<b>World Languages</b>	
World Languages	2
<b>Senior Demonstration</b>	
Senior Demonstration/Capstone	1
	<b>23.5</b>

# STEAM

- Westport's offerings in Science, Technology, Engineering, Arts, and Mathematics are comprehensive



# Science

	Westport	Darien	New Canaan	Region 9 Easton/Redding	Ridgefield	Weston	Wilton
Biology	✓	✓	✓	✓	✓	✓	✓
Chemistry	✓	✓	✓	✓	✓	✓	✓
Physics	✓	✓	✓	✓	✓	✓	✓
Aerospace	✓						
Anatomy and Physiology (Human Bio)	✓		✓	✓		✓	✓
Astronomy	✓		✓	✓	✓		
Biotechnology	✓				✓		
Environmental Science	✓	✓	✓	✓	✓		✓
Forensics	✓	✓	✓	✓	✓	✓	✓
Genetics		✓			✓		✓
Marine Biology	✓	✓	✓				
Medical Terminology	✓						
Meteorology	✓				✓		
Horticulture	✓						
Oceanography	✓				✓		
Science Research	✓	✓	✓	✓	✓		✓
Animal Behavior	(Pending)					✓	
Zoology	(Pending)						
Bioethics							✓
Botany		✓					
Earth Science		✓	✓	✓	✓	✓	✓
Neuroscience and Biopsychology		✓					

# Technology

	Westport	Darien	New Canaan	Region 9 Easton/Redding	Ridgefield	Weston	Wilton
Computer Programming	✓(S)	✓(C)	✓	✓(M)	✓(M)	✓(B)	✓(C)
Software Development	✓(S)		✓				
Web Programming/Applications	✓(S)	✓(C)					✓(C)
Audio Production	✓(M)						
Video Production	✓(M)	✓(M)	✓	✓	✓(A)		✓
Radio Production	✓(M)						
TV Studio and Documentary	✓(M)		✓(A,T)				
2-D Illustration				✓			✓
3-D Modeling				✓			✓
CAD/CAM		✓		✓		✓	✓
CISCO Networking				✓			
Computer Hardware		✓		✓			
Computer Applications/Keyboarding					✓	✓(B)	✓(C)
Sociology and GIS						✓(SS)	
Tech of Architecture				✓			

## Engineering

	Westport	Darien	New Canaan	Region 9 Easton/Redding	Ridgefield	Weston	Wilton
Engineering/ Applied Physics	✓(S)	✓(T)	✓(T)	✓(T)		✓(T)	
Stagecraft	✓(A)		✓(T)	✓(A)			✓(A/T)
Tech Ed./Material Science	✓(T)	✓(T)	✓(T)		✓(T)		
Automotive			✓(T)		✓(T)		
Civil Engineering and/or Architecture		✓(T)	✓(T)			✓(T)	✓(T)
Robotics					✓(T)		

## Arts

	Westport	Darien	New Canaan	Region 9 Easton/Redding	Ridgefield	Weston	Wilton
Animation	✓		✓(C)				
Costume/Fashion and Design	✓				✓		✓
Design & Technology	✓		✓		✓	✓	✓
Digital Darkroom (Photoshop)	✓	✓	✓	✓(T)		✓	✓
Journalism (incl. publication tech.)	✓(E)	✓(E)	✓(T)	✓(E/SS)			✓(E)
Music Technology	✓	✓	✓		✓	✓	✓
Photography	✓	✓	✓	✓	✓	✓	✓
Interior Design							✓(F)
Printmaking			✓	✓			
Visual Literacy	✓(E)						



# Mathematics

	Westport	Darien	New Canaan	Region 9 Easton/Redding	Ridgefield	Weston	Wilton
Applied Math	✓	✓	✓	✓	✓		✓
Algebra I	✓	✓	✓	✓	✓	✓	✓
Algebra II	✓	✓	✓	✓	✓	✓	✓
Geometry	✓	✓	✓	✓	✓	✓	✓
Pre-Calculus	✓	✓	✓	✓	✓	✓	✓
Calculus	✓	✓	✓	✓	✓	✓	✓
Multivariable Calculus	✓	✓	✓				
Differential Equations	✓						(S)
Accounting	✓			✓(B)	✓(B)		✓(B)
Discrete Math	✓						
Financial Literacy	✓		✓				
Personal Financial Management	✓	✓(B)	✓(B)	✓	✓(B)	✓(B)	✓(B)
Statistics/Probability	✓	✓	✓	✓	✓	✓	✓
Macro/ Microeconomics	✓(SS)	✓(SS)	✓(SS)		✓(SS)	✓(SS)	✓(SS)

# Relation to Economic Trends Local Opportunities

- Have established programs with support of local business
  - Staples Spectacular Student Challenge
  - Robotics Team/Maker Faire
  - Middle School PBL experiences
  - Internship Program
- Looking to further explore as part of high school requirement revision
- Essential Question for our discussion of vision for secondary education

# WESTPORT PUBLIC SCHOOLS

---

**ELLIOTT LANDON**  
*Superintendent of Schools*

110 MYRTLE AVENUE  
WESTPORT, CONNECTICUT 06880  
TELEPHONE: (203) 341-1010  
FAX: (203) 341-1029

To: Members of the Board of Education  
From: Elliott Landon  
Subject: Policy P3320: Purchasing  
Date: November 10, 2014

Over the past several meetings the Board of Education has reviewed, discussed and modified the above-referenced Policy and its accompanying Regulation. In accordance with our practice, this item now is being presented to you for approval at the meeting scheduled for November 10.

## **ADMINISTRATIVE RECOMMENDATION**

**Be It Resolved, That upon the recommendation of the Superintendent of Schools, the Board of Education approves Policy P3320 and its accompanying Regulation, as included with the memorandum to the Board of Education from the Superintendent of Schools dated November 10, 2014.**

A handwritten signature in cursive script, appearing to read "Elliott", is written in black ink. The signature is positioned in the lower right quadrant of the page, below the administrative recommendation text.

## **Business and Non-Instructional Operations**

### **Purchasing Policy**

#### **Purpose**

The Westport Board of Education recognizes the importance of maximizing the use of district resources, the need for sound business practices in spending public money, the requirement of complying with state laws governing purchasing, the importance of standardized purchasing regulations, and the need for clear documentation in meeting State of Connecticut and Federal Auditing requirements

Within the framework of applicable laws and regulations, purchases and use of material and other resources shall be accomplished in accordance with good business practices with the primary purpose of serving the program of instruction.

#### **Authority**

The duties of purchasing shall be centralized under the Director of School Business Operations who shall be responsible for all purchase transactions for the district. In accordance with the Westport Town Charter, the Director of School Business Operations is the designated representative of the Board of Education to act with the Finance Director of the Town to maximize economies of purchasing through sharing of purchases in all areas practicable. If questions arise, the scope of this provision shall be determined by the Board of Education.

The Superintendent or designee shall sign purchase orders and other purchase obligations. For the purpose of this policy, only the Director of School Business Operations shall be deemed the designee of the Superintendent for the signing of purchase orders and other purchase obligations.

#### **Purchasing Guides**

Purchasing services will include personnel and equipment necessary to process promptly all approved requisitions, to deliver goods and services promptly. Purchasing services will have as their criteria for all items and services:

1. Best possible quality;
2. Lowest possible cost; specifications of the user;
3. Availability when needed;
4. Efficient use of time of staff;
5. Compliance of suppliers and staff with equal employment opportunity and other Board policies;
6. Preference to Westport vendors where possible, providing price, quality and availability are equal to or better, than non-Westport vendors.

All purchases of goods and services with district funds must be made on a properly executed district purchase order or contract issued by the Director of School Business Operations.

## **Business and Non-Instructional Operations**

### **Purchasing Policy (continued)**

#### **Quantity Purchasing**

To help achieve both quality control and the price advantages of quantity purchasing, the administration is encouraged to:

1. Set specifications for goods and services as needed. Cite several existing, commercially available "standard brands" that meet those qualifications acceptable as examples.
2. Invite and/or advertise for vendors to bid on those examples, or comparable ones which the vendors believe to be acceptable according to the specifications.

#### **Bidding**

Competitive bidding is required as detailed below. Preference is to be given to local suppliers and vendors when quality and price are equal.

1. For purchases totaling between \$3,000 and \$5,000, at least three (3) verbal price quotations must be sought and recorded.
2. For purchases totaling between \$5,000 and \$10,000, formal written quotations from at least three (3) separate vendors shall be provided, if available.
3. For purchases above \$25,000, formal bid(s) must be sought.
4. The following purchases are not subject to competitive bidding except as stated in paragraph 7 below:
  - a. Purchases under \$3,000;
  - b. Emergency purchases;
  - c. Goods purchased from state agencies, such as furniture produced by the State Department of Corrections;
  - d. Goods purchased under state contracts;
  - e. Purchasing collaboratives involving federal, state, local governments and regional entities;
  - f. Surplus and secondhand purchases from another governmental entity;
  - g. Sole source goods or services;
  - h. Purchases to maintain equipment consistency;
  - i. Textbooks and other programmed instructional materials as only one source generally exists.
5. Price quotes/bids are not required when items are available from one vendor only (e.g., most educational media, software and services).

## **Business and Non-Instructional Operations**

### **Purchasing Policy**

#### **Bidding** (continued)

6. When purchasing from approved vendors using school district, state or purchasing consortium contracts, if multiple price quotes or bids are not obtained from separate vendors, a written explanation and/or documentation must be provided to demonstrate why the purchase from the chosen vendor(s) provides the greatest value and benefit. Value and benefit are not to be measured solely by price level.
7. Except as stated in paragraphs 4(b), 4(g), and 5 above, and regardless of any previously listed exceptions, for single item purchases over \$50,000 the formal bid process must be followed.
8. There shall be an annual review of collective purchases made from single vendors to ensure that the verbal bid quotation process is consistent with the purchasing policy.

#### **Financing**

The Board of Education, wherever possible, will seek the advice of the Board of Finance and the Education and Finance committees of the RTM as to manner of financing when considering purchase or lease agreements that obligate the Board of Education to finance the acquisition of goods by multi year periodic payments. A final decision will be made by the Board of Education.

Legal Reference: Connecticut General Statutes  
10-220 Duties of boards of education  
10-222 Appropriations amid budget

---

Policy adopted: March 15, 2004, November 10, 2014  
Policy modified: June 7, 2004  
Policy amended: October 20, 2014

WESTPORT PUBLIC SCHOOLS  
Westport, Connecticut

## **Business and Non-Instructional Operations**

### **Purchasing Procedures**

#### **Purpose**

To ensure that goods and services are acquired at the lowest possible cost without sacrificing quality or educational purpose; are within dollar amounts and purpose as approved in the budget; comply with federal, state, town, and Westport Public Schools requirements, as well as generally accepted business practices.

To insure oversight and accountability, purchasing is a two step process. Account managers may initiate purchase requisitions but only the business office may create and send purchase orders. (A computerized accounting software system converts approved purchase requisitions into purchase orders.)

#### **Purchasing Authority**

Only designated cost center managers, i.e., administrators and non-certified managers, may initiate a purchase requisitions. Managers may designate other staff to prepare the requisition. However, managers must always sign the purchase requisition.

#### **Processing Procedure**

Purchases may be made only by purchase order approved by the Director of School Business Operations. Any individual who orders goods and services without a purchase order approved by the Business Office is considered to be making a personal purchase. The Westport Public School District is not responsible for paying these types of bills.

All prospective purchases must be submitted as requisitions through the accounting software and also by hard copy prior to the event, purchase or planned reimbursement. The system automatically tests for fund availability. If there are insufficient funds in the account to be charged, the manager must complete a Transfer of Funds Request Form, attach that form to the purchase requisition and forward to the Business Office.

#### **Types of Purchase Requisitions**

1. **Descriptive** - This requisition should contain all the information needed to fill the order: quantity, full product description (including model number, size, color, etc.), individual unit pricing, extension of total cost, freight where applicable, vendor discount if available, and complete account coding. An attachment in lieu of order description may be used only in extreme circumstances.

## **Business and Non-Instructional Operations**

**R 3320(b)**

### **Purchasing Procedures (continued)**

#### **2. Standing (Encumbrance Only)**

This type of requisition should contain a brief description of the item(s) that will be ordered and the individual(s) authorized to place item orders. These are generally used for repairs or recurring weekly purchases of supplies.

#### **3. Emergency Purchases-** When uncontrollable circumstances require immediate acquisition of goods or services the following procedure is to be used:

- Requisition approved by account manager must be faxed to Business Office (341-1008) with cover note requesting emergency approval.
- Accounts Payable must be alerted by phone (Ext.1005) to expect the emergency fax.
- Once the emergency purchase is approved by the assistant superintendent for business, the order may be faxed or called to the vendor, using the purchase order number.

### **Payment Process**

The Business Office must have evidence that materials or services have been received in order to pay invoices:

1. The individual who receives an order must confirm receipt on-line.
2. All packing slips must be forwarded to the Business Office with the purchase order number written on them.
3. If partial order has been received the cost center should send the packing slip and a copy of the pink section of the purchase order to accounts payable. This will allow the Business Office to pay for the goods received, but keep the purchase order open waiting for the back ordered items to be delivered.

### **Bidding Guidelines**

1. **Under \$3,000** Pricing may be developed by comparing costs in current catalogs and should be confirmed with vendor.
2. **\$3,000 - \$4,999** Three (3) verbal quotes are required.
3. **\$5,000 - \$10,000** Three (3) written quotes must be obtained and attached to the requisition. Purchases should be made using the low quote. Any exceptions to low quote must be carefully explained.
4. **Over \$25,000** Formal bid(s) required.

Orders for like items or services that would ordinarily be purchased on one (1) purchase requisition cannot be separated into multiple purchases to keep the total below the bidding guidelines of \$3,000 for verbal quotes, \$5,000 for written quotes, and \$10,000 for formal bid.

Whenever appropriate, the use of state or other purchasing collaborative bids is encouraged (you may refer to: <http://www.das.state.ct.us>). If you are using a state or other collaborative bid, you must reference the bid number on the purchase order.



## **Business and Non-Instructional Operations**

### **Purchasing Procedures (continued)**

#### **Petty Cash**

Petty cash accounts are used to facilitate purchases under \$25.00 for which a purchase order cannot be issued because of the need for immediate cash, e.g., overnight mail. There may be instances where the sum used from the petty cash is a higher amount. The administrator would make sure that all proper documentation and a description of the use of the funds is clearly noted and authorized by him/her. Reimbursement for petty cash by any school or office must be submitted with a purchase requisition with proper account codes and all original receipts. Sales tax will not normally be reimbursed.

#### **Reimbursement For Professional Development**

An approved travel authorization and Aesop job number must be attached to the purchase requisition.

The Westport Public School District is tax exempt according to state statute; therefore sales tax is not normally paid or reimbursed.

---

Regulation approved: March 15, 2004, November 10, 2014  
Regulation amended: October 20, 2014

# WESTPORT PUBLIC SCHOOLS

---

**ELLIOTT LANDON**  
*Superintendent of Schools*

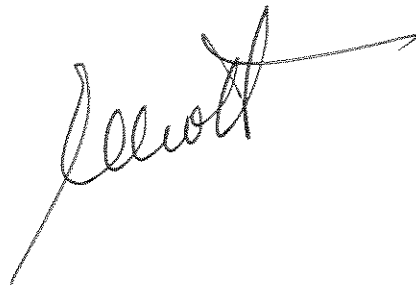
110 MYRTLE AVENUE  
WESTPORT, CONNECTICUT 06880  
TELEPHONE: (203) 341-1010  
FAX: (203) 341-1029

To: Members of the Board of Education  
From: Elliott Landon  
Subject: Policy P3160: Transfer of Funds  
Date: November 10, 2014

Over the past several meetings the Board of Education has reviewed, discussed and modified the above-referenced Policy and its accompanying Regulation. In accordance with our practice, this item now is being presented to you for approval at the meeting scheduled for November 10.

## **ADMINISTRATIVE RECOMMENDATION**

**Be It Resolved, That upon the recommendation of the Superintendent of Schools, the Board of Education approves Policy P3160 and its accompanying Regulation, as included with the memorandum to the Board of Education from the Superintendent of Schools dated November 10, 2014.**

A handwritten signature in black ink, appearing to read "Elliott", with a long horizontal line extending to the right from the end of the signature.

## **Business/Non-Instructional Operations**

### **Transfer of Funds between Categories**

In accordance with State law, "The Board of Education may transfer any unexpended or uncontracted - for portion of any appropriation for school purposes to any other item of such itemized estimate."

The Superintendent is authorized to transfer funds from any line item in the operating budget in an amount not to exceed \$10,000 under normal conditions and in an amount not to exceed \$25,000 in emergency situations, if the urgent need for the transfer prevents the Board from meeting in a timely fashion to consider such transfer. All transfers made in such instances shall be announced at the next regularly scheduled meeting of the Board.

Legal Reference: Connecticut General Statutes

10-222 Appropriations and budget. Financial information system. (As amended by PA 98-141).

---

Policy adopted: October 19, 1998  
Policy amended: November 10, 2014

## Business/Non-Instructional Operations

### Transfer of Funds between Categories

The Westport Board of Education shall prepare an itemized estimate of its budget each year for submission to the fiscal authority for review and appropriation. Line items in such budget estimate shall include, but are not limited to, the following:

1. Salaries
2. Employee benefits
3. Purchased services
4. Tuition
5. Supplies
6. Property and insurance
7. Other

Line items in the budget may be allocated more specifically by the Superintendent in the development, administration and monitoring of the budget.

The Superintendent shall be responsible for administering and monitoring the budget through the course of the year. The Superintendent shall maintain a system of appropriate expenditures and encumbrance accounting that is organized to conform to the requirements for State and Federal Accounting Reports. A quarterly budget report shall be prepared in a similar format to the annual budget showing for each line item:

1. The appropriated budget amount
2. Expenditure to date (including both encumbered and expended amounts)
3. Projected expenditures
4. The difference between the projected expenditures and the appropriation, and
5. General comments indicating the reasons for the difference

Such budget reports shall be presented to the Board of Education on a quarterly basis.

Based on the report, the Superintendent shall recommend to the Board transfers from one line item (as set forth above) to another as needed. All transfers may be included in a consent agenda, to be covered by a single motion.

The Superintendent is authorized to make such transfers as necessary if the urgent need for transfer prevents the Board of Education from meeting in a timely fashion to consider the transfer, provided that such transfers by the Superintendent shall not exceed \$25,000. The limit applies to each emergency transaction and is not cumulative for the year. Transfers made in such instances shall be presented for ratification at the next regularly scheduled meeting of the Board of Education.

Regulation approved:

October 19, 1998

Regulation amended:

November 10, 2014

# WESTPORT PUBLIC SCHOOLS

---

**ELLIOTT LANDON**  
*Superintendent of Schools*

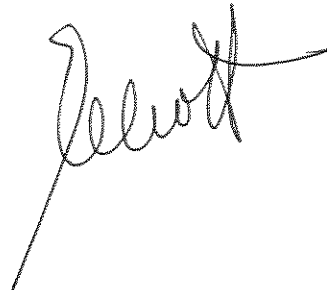
110 MYRTLE AVENUE  
WESTPORT, CONNECTICUT 06880  
TELEPHONE: (203) 341-1025  
FAX: (203) 341-1029

To: Members of the Board of Education  
From: Elliott Landon  
Subject: Acceptance of Gift  
Date: November 10, 2014

I am pleased to inform you that the Board of Education has been offered a generous gift, from the Westport Basketball Association valued at \$9,944. These funds will be used to replace the four (4) existing side basketball hoops at Saugatuck Elementary School with new updated baskets that are adjustable to heights of eight to ten feet, making them accessible for elementary school-aged children at the eight foot height. The existing hoops are fixed at a ten foot height, making them unusable for elementary school students.

## **ADMINISTRATIVE RECOMMENDATION**

**Be It Resolved, That upon the recommendation of the Superintendent of Schools, the Board of Education accepts with gratitude and appreciation a gift from the Westport Basketball Association, a gift valued at \$9,944 to replace the four (4) existing side basketball hoops at Saugatuck Elementary School with new updated baskets that are adjustable to heights of eight to ten feet.**





*James D'Amico*  
Director of Secondary Education

---

TO: Elliott Landon  
FROM: James D'Amico  
SUBJECT: New Course Proposals for Staples High School  
DATE: November 10, 2014

Please find attached the proposals for new courses at Staples High School for the 2015-16 school year. The courses being proposed are AP Computer Science Principles, Animal Behavior, and Zoology from the Science department, and Lifeguard Training from the Physical Education and Health department.

While all of these courses are being proposed as we examine the future offerings of Staples High School in light of the upcoming changes to the State's high school graduation requirements, all of them expand the opportunities for our students to explore fields of study that emphasize real-world problem solving and applications.

Dr. A.J. Scheetz and Mr. David Gusitsch, the Chairs of the Science and Physical Education and Health departments, respectively, will be in attendance to discuss particular questions about these proposals.

# ZOOLOGY (A LEVEL)

# COURSE OUTLINE FORMAT

## Staples High School

Course Title: *Zoology (A Level)*

Credit:         .25 Quarter  
                   .50 Semester  
                   1 Year

Credit Area(s): *Science*

Course proposed by:

If the course has been suggested by an individual teacher, a student, or some other agent, it should have been reviewed and accepted by the department(s) before being presented to Collaborative Team.

Administration         Board of Education         Students  
 K-12 Curr. Review     Department                 Other

Prerequisite: *Successful completion of Biology (any level)*

Rationale:

1. How does this course contribute to the department goals and objectives?  
*This course arose out of the work of Mr. Lazaroff and a student of his, Josh Hauser.*
2. What is the need this course addresses?  
*Students with an interest in animal life can currently explore marine animals in our Marine Biology course, but that limits the creatures studied. As most students' experiences are terrestrial in nature, a course that explores terrestrial animals in general, and terrestrial vertebrates in particular, is needed.*
3. How does this course support the recommendation of the latest K-12 review?  
*N/A*
4. How does this course support Staples' mission statement?  
*"The Staples High School community inspires learning, fosters integrity and nurtures empathy." Zoology is a subject of fascination among many members of the Staples community, (as borne out by the success of Marine Biology, the aquatic counterpart to Zoology) at Staples, which will inspire learning in our students. Integrity will be fostered through the exploration of the various species, and the understanding that these animals require the preservation of their habitat. Empathy will be nurtured through the exploration of the interactions of these animals and their environment, as well as the negative effects of mankind's encroachment upon, and destruction of, their environments.*
5. How does this course support the goals of the Westport 2025 initiative?  
*The study of Zoology involves a great deal of CRITICAL THINKING, especially in terms of the integration of structure and function, and the evolutionary advantages of the many adaptations studied. Students will use CREATIVE THINKING in their fictional creation of an organism that would have evolved to survive in a specific environment. The students will be using COMMUNICATION skills in their sharing of their fictional creatures, as well as their presentation of what they discovered in their work in dissection. Lastly, GLOBAL THINKING*



*will be utilized as they explore and compare the great variety of environments in the world, and the amazing creatures who have evolved in them, not to mention the dangers (deforestation, pollution, climate change, etc.) these animals face as humans have blindly expanded their civilization.*

### Staples Expectations for Student Learning Alignment:

1. Academic Expectations
  - Students will think critically in a variety of contexts and situations.
  - Students will be competent problem solvers.
  - Students will use technology as a tool for learning in both accessing and analyzing information.
  - Students will effectively communicate their solutions and understanding using a variety of media.
  - Students will think creatively and will adapt their thinking in response to both critical feedback and changing demands.
2. Civic Expectations
  - Students will demonstrate a sense of ethics both in their words and their actions.
  - Students will consider their actions and solutions within the context of the global environment.
3. Social Expectations
  - Students will work collaboratively towards common goals.

### Course Catalogue Description:

Prerequisite: *Successful completion of Biology (any level)*

Zoology is the study of animals. The structure and function, as well as the behavior, of animals, and how they have adapted to their environments, will be explored in detail. This scientific course is designed to teach students the basic principles of the diversity of life through the application of identification, classification, and laboratory investigation. *Dissections are required.*

### Course Content

- Introduction to the animal kingdom (3 days)
  - What is an animal
    - multicellular
    - feeding
    - gas exchange
    - sensory systems
    - mobility
    - reproduction
  - Ectotherm vs. Endotherm
  - Terrestrial vs. Aquatic vs. Aerial
  - Arctic vs. Temperate vs. Tropical
  - Vertebrate vs. Invertebrate
  - Asexual vs. Sexual
  - Social vs. Nonsocial
- Introduce evolution of animal groups (4 days)
  - Basic Evolutionary Mechanism

- Variation
  - Competition
  - Large numbers of offspring
  - Natural Selection
  - Genetics
- Evolutionary tree
  - Cladistics
- major adaptations (evolutionary problem solving)
- divergent vs. convergent
- taxonomy (as bridge between evolution and major classifications) (2 days)
- Major vertebrate classes anatomy (7 weeks)
  - Body System Introduction (**SLIC MEN R RED**)
  - Amphibia - Frogs, Toads, Salamanders
    - Skeletal
    - Muscular
    - Integumentary - sensitivity of skin
      - Lake Titicaca Giant Frog and low O<sub>2</sub> levels in water
    - Respiratory - Skin & Lungs
    - Cardiovascular
      - wood frogs, dormancy and natural antifreeze
    - Excretory
    - Digestive
    - Nervous
    - Reproductive
  - Reptilia
    - Skeletal
    - Muscular
    - Integumentary
    - Respiratory
    - Cardiovascular
      - temperate turtle brumation
    - Excretory
    - Digestive
    - Nervous
    - Reproductive
  - Aves
    - Skeletal
    - Muscular
    - Integumentary
    - Respiratory - Air sacs &
    - Cardiovascular
    - Excretory
    - Digestive

- Nervous
  - Reproductive
- Monotremata
  -
- Mammalia
  - Skeletal
  - Muscular
  - Integumentary
  - Respiratory
  - Cardiovascular
  - Excretory
  - Digestive
  - Nervous
  - Reproductive
- Behavior (7 weeks)
  - hunting and feeding
  - living space
  - defense
  - reproduction
  - intelligence
  - society
  - development
- What's next? (2 weeks)
  - Future is Wild
  - patterns in previous evolutionary history

Final Project: Design an animal to fit certain environmental requirements.

### Expectations for Student Learning (Outcomes)

#### Skills:

- Students should be able to communicate scientific design, results, analysis, & conclusions in a variety of formats.
- Students should be able to understand the relationship between structure and function.
- Students should understand and be able to discuss the scientific methods of inquiry and unifying themes of organization with respect to classification/evolution/taxonomy.
- The student is able to interpret and appraise the relationships in ecosystems- interactions between organisms and between organisms and the environment.
- The student is able to interpret and design models for complex systems.

#### Knowledge:

- demonstrate an understanding of the scientific method, specifically developing proficiencies on performing, documenting, and analyzing laboratory methods and experiments;
- understand the organization of life from molecules and cells to organisms and ecosystems and how the interactions of these levels have shaped life on earth, specifically:
  - a. recognizing and comparing the characteristics (anatomy and physiology, ecological niche, behavior, *etc.*) that optimize the ability of an animal to survive in its environment,
  - b. developing an appreciation of the ecological importance of animals;
- understand and describe the relationship between structure and function in the organization and survival of animals and each major animal group;
- understand and describe the principles of evolution and the evolutionary relationships among animal groups;
- develop an appreciation for animal diversity through the in-depth study of animal taxonomy, cladistics and systematics.
- Students will learn to recognize and be able to classify the major (common, economically or medically important, evolutionarily significant, or for other reasons) groups of animals.
- Students will learn specialized terminology and basic concepts of zoology.
- Students will learn evolutionary relationships among the different groups of animals.
- Students will learn basic, selected external and internal structure and associated biology/function for different kinds of animals.
- Students will learn quantitative measurement, and hypothesis formulation and testing in zoology.
- Students will come to appreciate and enjoy the subject of zoology (i.e., have fun) and be able to place the subject in the larger context of human knowledge and experience on a global scale.

Equipment/Materials/Texts:

Access to computers and servers. Internet access.

*Integrated Principles of Zoology*, by Jr., Cleveland Hickman, Susan Keen, Allan Larson, David Eisenhour  
 ISBN-13: 978-0073040509 ISBN-10: 0073040509 Edition: 15th

Dissection specimens (1 specimen of each per every pair of students): Annelid (Earthworm), Arthropod (Crayfish), Snake (*Anolis carolinensis*), Bird (Pigeon), Mammal (Rat)

Various David Attenborough videos will also be presented.

<https://www.youtube.com/playlist?list=PLAhf89JbnzaI2iYesh4PyO3oo081NgDtj>

Depending on the number of sections, the budgetary impact would involve class sets of the textbook, videos, and other resources, as well as the cost for each of the 5 specimens above, with 2 students per specimen.

Projected Cost (from Department Chair's recommendation): \$25,000

# ANIMAL BEHAVIOR (A LEVEL)

# COURSE OUTLINE FORMAT

## Staples High School

Course Title: *Animal Behavior (A Level)*

Credit: \_\_\_\_\_ .25 Quarter  
            X   .50 Semester  
          \_\_\_\_\_ 1 Year

Credit Area(s): *Science*

Course proposed by:

If the course has been suggested by an individual teacher, a student, or some other agent, it should have been reviewed and accepted by the department(s) before being presented to Collaborative Team.

\_\_\_\_\_ Administration      \_\_\_\_\_ Board of Education      \_\_\_\_\_ Students  
\_\_\_\_\_ K-12 Curr. Review        X   Department      \_\_\_\_\_ Other

Prerequisite: *Successful completion of Biology (any level)*

Rationale:

1. How does this course contribute to the department goals and objectives?  
*On of the main goals of the Science department is that of problem-solving. This course will explore the observation of animal behavior, and will teach students the basics, not only of animal behavior itself, but also ways in which the students can objectively observe the behavior and learn from it.*
2. What is the need this course addresses?  
*The study of animal behavior is a good fit for the (a) experiential, (b) naturalistic, and (c) interpersonal learners in the Staples community. The exploration of the social behavior of animals seems like an excellent fit for this group of learners, in that it focuses on (a) the observation and mimicry of the animal behavior, (b) the behavior in the context of both the physical and social environment, and (c) the interactions among the animals. In addition, given the CAPT, and other state, not to mention federal, curricular obligations, animal behavior is rarely explored in the science classroom, and it is an area of great interest to many students.*
3. How does this course support the recommendation of the latest K-12 review?  
*N/A*
4. How does this course support Staples' mission statement?  
*"The Staples High School community inspires learning, fosters integrity and nurtures empathy." Animal behavior has the benefit of being inherently interesting to many students, and this course will be a way to foster this in the students. In addition, empathy is an important part of the behavior of many animals, and an exploration of this behavior in animals will further the development of this in students themselves.*
5. How does this course support the goals of the Westport 2025 initiative?  
*The study of animal behavior supports the idea of CRITICAL THINKING, as students need to analyze behavioral patterns and discern the evolutionary advantages of those behaviors. The animal behavior course also fosters CREATIVE THINKING in that students have to design a*

*behavioral study, as well as ways to modify existing zoo enclosures to the benefit of the animals. The students will be COMMUNICATING their results with the class. Lastly, the students will use GLOBAL THINKING in their study of the effects of behavior on wildlife management.*

### Staples Expectations for Student Learning Alignment:

1. Academic Expectations
  - Students will think critically in a variety of contexts and situations.
  - Students will be competent problem solvers.
  - Students will use technology as a tool for learning in both accessing and analyzing information.
  - Students will effectively communicate their solutions and understanding using a variety of media.
  - Students will think creatively and will adapt their thinking in response to both critical feedback and changing demands.
2. Civic Expectations
  - Students will demonstrate a sense of ethics both in their words and their actions.
  - Students will consider their actions and solutions within the context of the global environment.
3. Social Expectations
  - Students will work collaboratively towards common goals.

### Course Catalogue Description:

Prerequisite: *Successful completion of Biology (any level)*

This course concentrates on how animals behave, why animals behave the way they do and how scientists design experiments to study their behavior. Students will learn about the biology behind behavior, animal communication, feeding behavior, mating, predator-prey relationships, aggression, territorial behavior, social behavior and parental care. For the lab portion of this course, observation of actual animals, video, and out-of-classroom activities will be utilized.

### Course Content

- Introduction to the animal behavior
  - hunting and feeding
  - competition for space
  - defense (individual and group)
  - courtship behavior
  - rearing of offspring
  - social behavior
  - dominance hierarchies
- How to observe animal behavior
  - avoiding anthropomorphism
  - qualitative methods
  - quantitative methods
- Evolution of animal behavior
  - Basic Evolutionary Mechanism
    - Variation
    - Competition

- Large numbers of offspring
  - Natural Selection
  - Genetics
- major adaptations (evolutionary problem solving)
- Major animal groups, and behaviors associated with them
  - Amphibians
  - Reptiles
  - Birds
  - Mammals
    - Large mammals
      - Herbivores
      - Carnivores
    - Wild vs. domestic cats
    - Wolves vs. domestic dogs
    - Primates
- Animals in Zoos
  - The purpose of zoos in the past
  - The modern purpose of zoos
  - Disturbed behavior
  - Importance of environmental enrichment
  - Visiting a zoo to analyze enclosures, and to collect data on the animals.

Final Project: Design an independent exploration of animal behavior.

### Expectations for Student Learning (Outcomes)

#### Skills:

- Ability to look at animal behavior objectively, without anthropomorphizing that behavior
- Ability to collect data on animal behavior through observation
- Ability to represent that data in a quantitative format
- Ability to analyze and interpret quantitative information
- Ability to determine the best course of action, based on behaviors, for the care of animals in a zoo setting

#### Knowledge:

- Understand the evolutionary importance of animal behavior.
- Distinguish between proximate and ultimate causation and give examples of each.
- Understand the integration of genetics and neurology with ethology.
- Differentiate among instincts, non-associative learned and associative learned behaviors.
- Understand the evolutionary limitations of learning, classical, and operant conditioning.
- Define imprinting and sensitive phase to explain how behaviors develop.
- Understand the complications associated with the determination of cognitive behaviors in animals.
- Explain how information is communicated among group members of non-human and humans.
- Define migration and explain why and how migration patterns change over time.



- Discuss the concept of the stimulus/response chain as it relates to courtship behaviors. Explain why these behaviors are species specific.
- Understand the genetic basis for behavior among eusocial insect societies.
- Define behavioral ecology. Understand its association with adaptive significance and fitness.
- Compare foraging behaviors of generalists and specialists and understand how the optimal foraging theory explains foraging efficiency.
- Explain the need for territoriality in animals and the economic risks associated with such behavior.
- Understand the associations between parental investment and mate choice and how these interactions affect the evolution of mating systems.
- Explain how sexual selection and secondary sexual characteristics affect reproductive competition.
- Explain how inclusive fitness is related kin selection and under what circumstances it can lead to altruistic behavior.
- Explain the benefits of engaging in reciprocal altruism
- Define sociobiology. Cite advantages and disadvantages of living in social groups.
- Compare the complexity of vertebrate societies with that of eusocial insects. Understand the value of such activities as cooperative breeding and alarm calling in vertebrate societies.

Equipment/Materials/Texts:

Access to computers and servers. Internet access.

*The Secret Language of Animals: A Guide to Remarkable Behavior*, by Janine M. Benyus, Juan Carlos Barberis, Alexandra Horowitz, ISBN: 1579129684 (ISBN13: 9781579129682)

*An Introduction to Animal Behaviour Paperback* by Aubrey Manning and Marian Stamp Dawkins  
ISBN-13: 978-0521165143 ISBN-10: 0521165148 Edition: 6th

Various David Attenborough videos will also be presented.

<https://www.youtube.com/playlist?list=PLAhf89JbnzaI2iYesh4PyO3oo081NgDtj>

Depending on the number of sections, the budgetary impact would involve class sets of the textbook, videos, and other resources, as well as the cost for at least two field trips to the Beardsley Zoo in Bridgeport for (1) initial general observation, and (2) data gathering for final student projects.

Projected Cost (from Department Chair's recommendation): \$25,000

# LIFEGUARD TRAINING

# Staples High School Course Proposal

**Course Title:** Lifeguard Training

**Credit:** \_\_\_\_\_ .25 Quarter  
 .5 Semester  
\_\_\_\_\_ 1 Year

**Credit Area(s):**

The credits for this course would go toward satisfying the Physical Education and Health graduation requirements.

**Prerequisites/Eligibility:**

Students must be at least a junior in good standing who:

- is able to swim 300 meters (12 lengths of the pool) continuously using freestyle (100 meters), breaststroke (100 meters) and choice (100 meters).
- is able to swim twenty meters and do a surface dive to retrieve a diving block at a depth of approximately fourteen feet, before returning to the pool deck using a rescue kick.
- is able to tread water using various techniques.
- has participated in and passed grade 9 and grade 10 Aquatics in Physical Education.
- has earned a cumulative “B” average in Physical Education.
- is at least 15 years of age.

**Course Development:**

If the course has been suggested by an individual teacher, a student, or some other agent, it should have been reviewed and accepted by the department(s) before being presented to Collaborative Team.

Course proposed by

\_\_\_\_\_ Administration    \_\_\_\_\_ Board of Education    \_\_\_\_\_ Students  
\_\_\_\_\_ K-12 Curriculum Review     Department    \_\_\_\_\_ Other

**I. Rationale:**

The Staples High School Physical Education Department has recently reviewed its curriculum which included alignment with state and national standards, school and district initiatives, and a review of student survey responses. This course reflects student interest, aligns with the Lifetime Physical Education offering and meets local, state and national standards. Upon successful completion of the course, students will be qualified for and eligible to apply for employment opportunities that utilize their learned skill set.

**II. Staples Expectations for Student Learning Alignment:**

- Academic:
  - learn the skills necessary for preventing, responding to, and treating aquatic and non-aquatic injuries.
  - learn and successfully pass written and skill assessments based on content covered in the text and practical class work.
  - learn, follow and enforce aquatic safety rules.

- Civic/Social:
  - learn qualities of professionalism and the responsibilities of becoming a professional lifeguard.
  - learn to work as a team to successfully perform a variety of skills (i.e., CPR and back-boarding).
  - learn qualities of leadership and how to cooperate, control and manage people involved in aquatic and/or group activities.

### **III. Course Catalogue Description:**

Lifeguard Training offers students an opportunity to learn the duties, responsibilities and requirements of becoming a lifeguard and how to carry these out in a responsible, professional manner. Students will learn a number of skills required for a lifeguard position including: advanced skills in swimming, proper use of lifesaving equipment, preventing disease transmission, using appropriate surveillance techniques, how to manage a spinal injury victim, and how to perform first aid and/or CPR on a victim; amongst others. Characteristics and responsibilities of a professional lifeguard, such as appropriate interactions with the public, accommodating patrons with disabilities, and addressing uncooperative patrons are also addressed. Students are eligible to earn certifications in the following: pool and waterfront lifeguard, automated external defibrillator (AED), CPR for the professional rescuer and first aid.

### **IV. Course Content (Themes, topics):**

- learn the skills necessary to assist people in distress in a variety of situations in an aquatic emergency.
- learn CPR for the professional rescuer that will include material necessary to help adults, children, and infants.
- learn the First Aid needed to treat victims in a variety of situations
- learn how to treat victims of a spinal injury.
- learn the necessary steps to take during and after an emergency.

### **V. Educational experiences in this course will assure that students will:**

- Skills (from district, state and national Physical Education standards):
  - Demonstrates competency in a variety of motor skills and movement patterns.
  - Exhibits responsible personal and social behavior that respects self and others.
  - Demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness.
- Knowledge
  - Applies knowledge of concepts, principles, strategies, and tactics related to movement and performance.
  - Recognizes the value of physical activity for health, enjoyment, challenge, self-expression and/or social interaction.

### **VI. Student Assessment:**

- Students will be assessed using written and skill requirement assessments. Departmental protocol and guidelines are also expected to be followed.

### **VII. Materials/Texts:**

- Certification                   \$35 (upon successful completion of all requirements)
- Pocket mask(s)               \$20 (required)
- No text fee (online/free)

**VIII. Required Resources and Budget:**

- We are considering offering 1 section in the first semester and 1 section in the second semester. This would require a .2 FTE teaching assignment.
- Certification and required pocket mask(s) for each student (x18 student max per semester):
  - \$990 per semester (maximum)
  - \$1980 per year (maximum)
- American Red Cross Instructor Package with CPR monitor and additional “lung bags” (**one-time fee**):
  - \$1400.00

AP COMPUTER SCIENCE  
PRINCIPLES  
(AP CS PRINCIPLES)

# COURSE OUTLINE FORMAT

## Staples High School

Course Title: *AP Computer Science Principles (AP CS Principles)*

Credit:                   .25 Quarter  
                                .50 Semester  
                           X   1 Year

Credit Area(s): *Science*

Course proposed by:

If the course has been suggested by an individual teacher, a student, or some other agent, it should have been reviewed and accepted by the department(s) before being presented to Collaborative Team.

       Administration                   Board of Education                   Students  
       K-12 Curr. Review          X   Department                           Other

Prerequisite: *Successful completion of Introduction to Web Programming or enrollment 11<sup>th</sup> or 12<sup>th</sup> grade.*

Rationale:

1. How does this course contribute to the department goals and objectives?  
*One of the main goals of our the science department is to teach students to be creative problem solvers and to think analytically. The new CS Principles course is designed to focus on those skills by being organized around seven "Big Ideas." These are that: computing is a creative process, abstraction facilitates focus on relevant concepts, data and information facilitate creation of knowledge, algorithms develop and express solutions to problems, programming leads to problem solving, human expression and the creation of knowledge, the Internet is a central component of modern computing, and finally, computing has global impacts.*
2. What is the need this course addresses?  
*This course provides another avenue for students to pursue their interest in STEM-related fields. Many students have taken the computer programming courses offered through the science department. These courses are designed to stand alone, but there are many students who would benefit from a broader understanding of computer science principles.*
3. How does this course support the recommendation of the latest K-12 review?  
*N/A*

*The Staples High School community inspires learning, fosters integrity, and nurtures empathy.*

4. How does this course support Staples' mission statement?

*The mission statement focuses on three main themes, all of which are important for the AP CS course. For example, students need to use empathy when trying to solve a computing problem that is not just a theoretical issue, but something that other people will use and value. Integrity is central to the course in the sense that students will be producing "portfolio"-type artifacts that must represent their own work and will be evaluated by the College Board. Finally, community is important in this course because no programming is done in isolation. Students must tap into the large, vibrant and collaborative online programming community in order to take advantage of work done by others.*

5. How does this course support the goals of the Westport 2025 initiative?

*CS Principles is designed to make computer science and coding accessible to a wider range of students. It is not just about coding, rather it is a course designed to expose students to a range of principles about computers. As such, it is well aligned with all four of the major domains of the lens; Global Thinking in the sense that one performance task asks students to report on a technology that has had significant global impact, Critical Thinking in the sense that students will have to use computers to solve problems, Communication in the sense that the performance tasks ask students to communicate to others about the knowledge they generated via computing and finally and perhaps most significantly, Creative Thinking in the sense that ALL computer programming is essentially a creative endeavour in which a person engages.*

#### Staples Expectations for Student Learning Alignment:

1. Academic Expectations

- Students will think critically in a variety of contexts and situations.
- Students will be competent problem solvers.
- Students will use technology as a tool for learning in both accessing and analyzing information.
- Students will effectively communicate their solutions and understanding using a variety of media.
- Students will think creatively and will adapt their thinking in response to both critical feedback and changing demands.

2. Civic Expectations

- Students will demonstrate a sense of ethics both in their words and their actions.
- Students will consider their actions and solutions within the context of the global environment.

*The Staples High School community inspires learning, fosters integrity, and nurtures empathy.*



### 3. Social Expectations

- Students will work collaboratively towards common goals.

#### Course Catalogue Description:

Prerequisite: *Successful completion of Introduction to Web Programming or good standing in 11<sup>th</sup> or 12<sup>th</sup> grade.*

The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. The key sections of this framework include; focus on creating computational artifacts, connecting computing to everyday life, abstracting problems to find solutions, analyzing both problems and solutions, communicating your thoughts and collaborating with peers and the larger computing community

#### Course Content

Students will learn about the impact computers have on our daily lives. They will learn how to write code that will serve useful functions. Students will explore how digital representations of phenomena can be generated and manipulated. Students will learn how to manipulate large data sets in order to extract meaningful and useful information from those data. Above all, students will learn that creativity is at the heart of computer programming.

#### Expectations for Student Learning (Outcomes)

The information below is derived from the College Board description of the course.

#### Skills:

Analyze the considerations involved in the computational manipulation of information.  
Analyze computational artifacts.  
Analyze how computing affects communication, interaction, and cognition.  
Analyze the beneficial and harmful effects of computing.

Appropriately connect problems and potential algorithmic solutions.

Collaborate when processing information to gain insight and knowledge.  
Collaborate to solve a problem using programming.  
Collaborate in the creation of computational artifacts.

Communicate insight and knowledge gained from using computer programs to process information.

Connect computing within economic, social, and cultural contexts.

Develop an abstraction.  
Develop an algorithm designed to be implemented to run on a computer.

*The Staples High School community inspires learning, fosters integrity, and nurtures empathy.*

Develop a correct program.

Employ appropriate mathematical and logical concepts in programming.

Evaluate a program for correctness.

Express an algorithm in language.

Explain how programs implement algorithms.

Use computing tools and techniques to create artifacts.

Use computing tools and techniques for creative expression.

Use models and simulations to raise and answer questions.

Use computers to process information to gain insight and knowledge.

Use computing to facilitate exploration and the discovery of connections in information.

Use large datasets to explore and discover information and knowledge.

Use computing tools and techniques for creative expression.

Use programming as a creative tool.

Use abstraction to manage complexity in programs.

#### Knowledge:

(What students need to know)

A creative process in the development of a computational artifact can include but is not limited to employing non-traditional, non-prescribed techniques; the use of novel combinations of artifacts, tools and techniques; and the exploration of personal curiosities.

Creating computational artifacts employs an iterative and often exploratory process to translate ideas into tangible form.

A computational artifact is anything created by a human using a computer and can be but is not limited to a program, image, audio, video, presentation, or web page file.

Creating computational artifacts requires understanding and using software tools and services.

Computing tools and techniques are used to create computational artifacts and can include but are not limited to programming IDEs, spreadsheets, 3D printers, or text editors.

#### Assessment:

Students are required to generate of at least two computational artifacts (the computational portfolio). These artifacts will be evaluated as part of the AP exam.

#### Equipment/Materials/Texts:

*The Staples High School community inspires learning, fosters integrity, and nurtures empathy.*

Access to computers and servers. Internet access.