



Pearson

# Mastering Summer 2017 Update

Enhancements to help you - and  
your students - get the most from  
Mastering





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## The **Mastering Summer 2017 Release**

delivers a refreshed student experience that improves alignment with accessibility standards, provides instructors with deeper insight into student and class performance, and promotes student learning to help mitigate cheating.

# My Courses Portal Updates

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Instructor access to information about courses in the My Courses Portal has been improved! Updates include a refreshed forgotten username/password screen and, for courses integrated with an LMS, visible listing of LMS partners. Instructors will also now have the ability to create **categories for improved organization** and a shortcut for **easier access to nested student courses** via the new pin/unpin functionality.



# Shortcuts to Nested Student Courses

Instructors will now have the ability to create a shortcut for **easier access to nested student courses under instructor-only courses** on the My Courses Portal home page via the new pin/unpin functionality. This functionality is available in both the tile and list view.

The screenshot displays the My Courses Portal interface. At the top, it shows the user's name 'Hi, Carol Johnson' and options for 'Sign Out' and 'Help'. Below this, there are tabs for 'Active', 'Inactive', and 'Announcements', along with buttons for 'Create/Copy Course' and 'Enroll as Section Instructor'. A search bar is located below the tabs. The main content area is titled 'Main (4)' and contains three course tiles. The first tile is for 'johnson34972' offering 'Intermediate Trigonometry F 10:30am' with 34 enrolled students. The second tile is for 'Coordinator Course' offering 'Go! Series Course for All My Algebra Courses' with 11 active member sections. The third tile is for 'johnson34974' offering 'Algebra & Trigonometry M 7:30pm' with 20 enrolled students. A red box highlights the pin/unpin icon on the third tile, with a red arrow pointing to it from the right.

# Categories for Improved Organization

Both students and instructors can personalize how their MyLab courses appear on the main portal page by creating categories to group and sort courses/products. Users can create categories to group courses by semester, discipline, or any other organizing structure that works for them.

The screenshot displays the MyLab portal interface. At the top, there are tabs for 'Active', 'Inactive', and 'Announcements'. To the right, there are buttons for 'Create/Copy Course' and 'Enroll as Section Instructor'. Below the tabs is a search bar and an 'Add Category' button, which is highlighted with a red box. The main content area shows a 'Coordinator Course' card on the left and a '+ Create/Copy Course' button in the center. Below this, there are two category sections: 'Semester 2 - 17 (0)' and 'Semester 1 - 17 (1)'. The 'Semester 2 - 17 (0)' section is highlighted with a red box and contains the text 'Category is empty. Drag a course here to add it to Semester 2 - 17.' To the right of this section is a control panel with a gear icon, a downward arrow, and a dropdown arrow, also highlighted with a red box. The 'Semester 1 - 17 (1)' section contains a course card for 'johnson34972 Intermediate Trigonometry F 10:30am' with enrollment details for the period Aug 23, 2016 - Jan 31, 2017.

1. Users can create, remove, rename, or move, categories in the My Courses Portal.
2. Categories can be created on all page views: Active, Inactive, and Nested.
3. After setting up categories, they will be visible with expand and collapse options.

# Listing of LMS Partners

For instructors who have integrated their Mastering course with their on-campus learning management system, access to information about courses in the My Courses Portal has been improved with visible listing of LMS partners in both the tile and list view.

The screenshot displays the 'Details' page for a course titled 'BB CM Course for Senkadagala Release 5'. The interface includes a sidebar on the left with a course tile and a main content area on the right. The course tile shows the title 'Amplifire for Pegasus Test Link', the dates 'Sep 28, 2014 - Sep 28, 2017', and the user ID 'abey33953'. The main content area features a blue header with the course title and a 'Details' link. Below the header are three buttons: 'Get Registration Instructions', 'Edit Course Details', and 'Open Roster'. The course details are listed in a key-value format:

Instructor(s):	abey, dini (Primary Instructor)
Your Role:	Instructor
Course ID:	abey47392
Course Type:	Student Course
Paired with LMS:	Blackboard
Course Creation Date:	May 19, 2016
Maximum Course End Date:	May 19, 2018
Course Dates:	May 19, 2016 – May 19, 2018
Allow Copy:	Yes

At the bottom, the 'Original Course Materials' section shows a 'New Edition Available' button.

# Student Course Home Experience

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Students using Mastering will now experience a more streamlined course home experience designed to help focus students on what to do next and improve accessibility.



# Student Course Home Experience

For students using a Mastering course not integrated with an on-campus learning management system, the course home has been completely redesigned with a more streamlined layout. The new experience improves navigation and accessibility to help students see exactly what is expected of them in their Mastering course.

The screenshot shows the MasteringBiology Course Home interface for 'Introduction to Science'. The interface is divided into a left sidebar and a main content area. The sidebar contains navigation links: 'My Courses', 'Course Home', 'Scores', 'eText 2.0', 'Dynamic Study Modules', 'Study Area', and 'Course Materials'. The main content area is titled 'Course Home' and includes sections for 'Announcements (1)', 'Assignments (6)', and 'Past Due Assignments (3)'. A 'Learning Catalytics' button is located in the top right corner. A calendar icon is visible in the bottom right corner of the main content area. Red boxes and numbers (1-5) highlight specific features: 1 points to the 'My Courses' link, 2 points to the 'Dynamic Study Modules' link, 3 points to the 'Learning Catalytics' button, 4 points to the 'Assignments (6)' section, and 5 points to the calendar icon.

Assignment	Due Date	Time	Status
Homework 1: Logic and Observation	06/02/17	12:00 PM	3 of 12 complete
Homework 2: Heritable Information	06/02/17	12:00 PM	3 of 12 complete
Chapter 1: Quiz 1	06/02/17	12:00 PM	
Homework 3: Introduction to Experimental Observa...	06/02/17	12:00 PM	

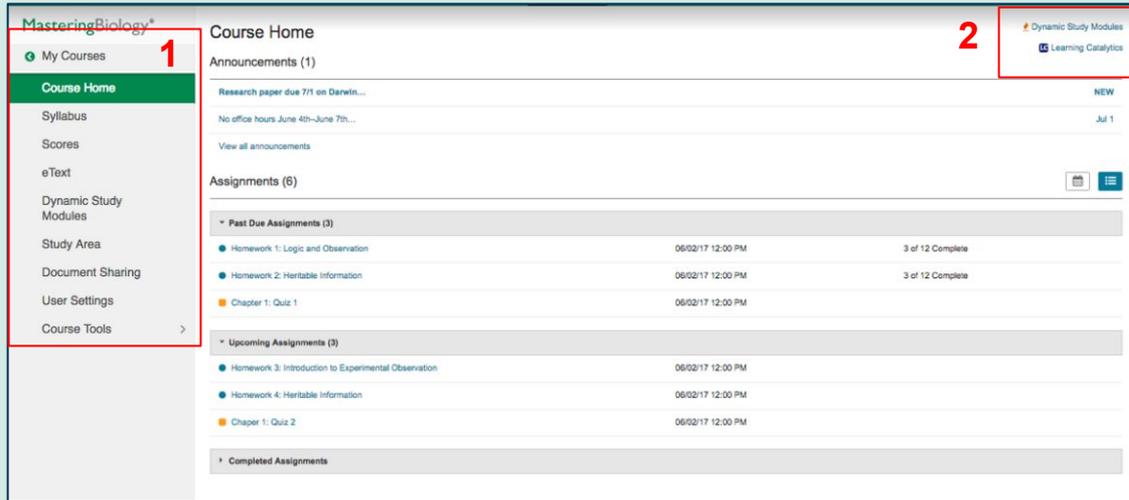
New (1) course menu updates include a (2) link to Dynamic Study Modules and Assignments moves to the center panel.

A (3) Learning Catalytics button appears if an instructor creates active student sessions.

The center panel displays (4) upcoming assignments and each student's completed activities along with a (5) new calendar view (*available July 2017*).

# Student Course Home Experience

For students using a **Modified Mastering** course (i.e., integrated with an on-campus learning management system), the course home has been refreshed to improve navigation and accessibility. This new experience helps students see exactly what is expected of them in their Mastering course.



In the (1) course menu\*, Course Materials replaces Document Sharing, Dynamic Study Modules appears as an item, and Assignments moves to the center panel.

A (2) Dynamic Study Modules button appears in the upper right, along with a Learning Catalytics button that appears only if an instructor creates active student sessions.

*\*Course menu updates will appear for new courses created with updated course masters, which will be released throughout the summer. Previous courses and copies of previous courses will not see these course menu updates.*

# Student Course Home Experience

For students using a **Modified Mastering** course (i.e., integrated with an on-campus learning management system) the course home has been refreshed to improve navigation and accessibility. This new experience helps students see exactly what is expected of them in their Mastering course.

The screenshot shows the MasteringBiology Course Home interface. A sidebar on the left contains navigation options: My Courses, Course Home (highlighted), Syllabus, Scores, eText, Dynamic Study Modules, Study Area, Document Sharing, User Settings, and Course Tools. The main content area is titled 'Course Home' and features a 'Dynamic Study Modules' badge and a 'Learning Catalytics' badge. The 'Announcements (1)' section is highlighted with a red box and a red number '3', showing a 'Research paper due 7/1 on Darwin...' and 'No office hours June 4th-June 7th...'. The 'Assignments (6)' section is highlighted with a red box and a red number '4'. It is divided into 'Past Due Assignments (3)' and 'Upcoming Assignments (3)'. The 'Upcoming Assignments' table is as follows:

Assignment	Due Date	Progress
Homework 3: Introduction to Experimental Observation	06/02/17 12:00 PM	
Homework 4: Heritable Information	06/02/17 12:00 PM	
Chapter 1: Quiz 2	06/02/17 12:00 PM	

A red box and a red number '5' highlight a calendar icon in the top right of the assignments section. A small icon in the top right corner of the assignments table is also highlighted with a red box.

The center panel displays (3) announcements directly on the page with date stamps as well as (4) upcoming assignments and each student's completed activities.

A (5) new calendar view will be available July 2017.

# Document Sharing

Document Sharing enables group projects and collaboration with Modified Mastering.



# Document Sharing

Document Sharing\* enables group projects and other collaborations within **Modified Mastering** courses. Capabilities include allowing students to upload and share document with classmates, or with instructors.

MasteringGeology™

- My Courses
- Course Home
- Syllabus
- Scores
- eText
- Dynamic Study Modules
- Study Area
- Document Sharing
- User Settings
- Course Tools

## Document Sharing

### Document Sharing Categories

[Add Category](#)

Categories	Edit
> Tarbuck 12e: Tarbuck 12e	

**Note:** Only Custom Categories can be renamed and deleted.

### Tarbuck 12e: Tarbuck 12e

[Upload Document](#) | [Download Documents](#)

<input type="checkbox"/> File Name/Description	Owner	Date/Time* ▼	Size	Share	Downloads
There are no documents in this category.					

\* Times are displayed in (GMT-05:00) Eastern Time (US & Canada)

*\*Document Sharing replaces Course Materials. Instructors who utilized Course Materials need to download those assets and upload them into the new Document Sharing area.*

# Accessibility

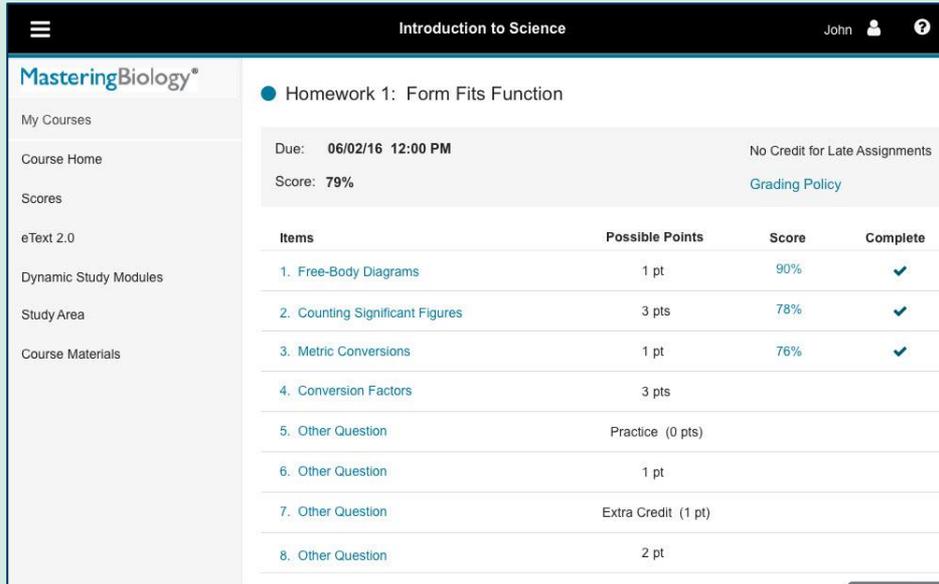
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Pearson's defining goal — to help people make progress in their lives through learning — can only be fulfilled when our educational materials are accessible to all users. Summer 2017 Mastering updates include enhancement to improve alignment with WCAG 2.0 AA guidelines.



# Accessibility Updates

We continue to make steady progress in developing our learning platforms, rich media assets, and all content as closely aligned to accessibility guidelines as possible. In addition to student course home updates, the following Summer 2017 enhancements improve Mastering's alignment to WCAG 2.0 AA guidelines.



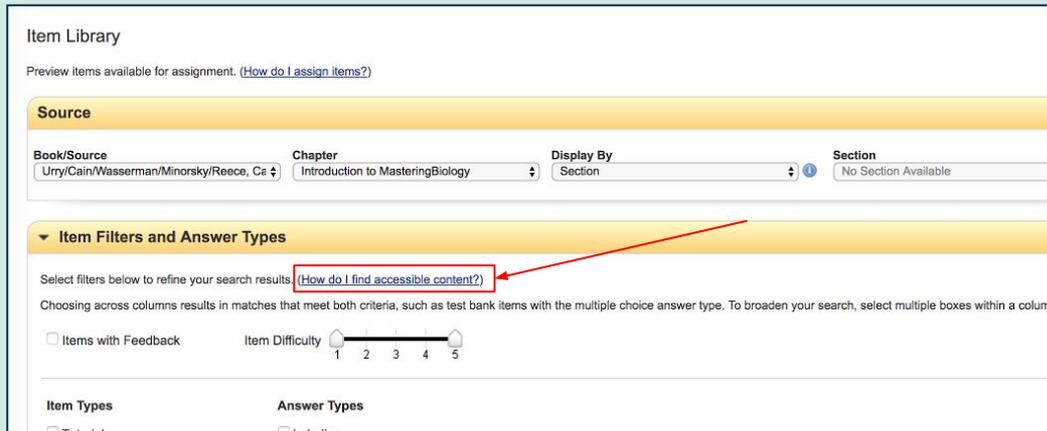
The screenshot displays the MasteringBiology interface for a course titled "Introduction to Science". The user is identified as "John". The main content area shows "Homework 1: Form Fits Function" with a due date of "06/02/16 12:00 PM" and a score of "79%". A table lists the items in the assignment:

Items	Possible Points	Score	Complete
1. Free-Body Diagrams	1 pt	90%	✓
2. Counting Significant Figures	3 pts	78%	✓
3. Metric Conversions	1 pt	76%	✓
4. Conversion Factors	3 pts		
5. Other Question	Practice (0 pts)		
6. Other Question	1 pt		
7. Other Question	Extra Credit (1 pt)		
8. Other Question	2 pt		

The Mastering Assignment List has improved keyboard and screen reader navigation. Changes include the list opening inframe and hints within the Content Player opening in-line.

# Accessibility Updates

We continue to make steady progress in developing our learning platforms, rich media assets, and all content as closely aligned to accessibility guidelines as possible. In addition to student course home updates, the following Summer 2017 enhancements improve Mastering's alignment to WCAG 2.0 AA guidelines.



The screenshot shows the 'Item Library' interface. At the top, it says 'Item Library' and 'Preview items available for assignment. (How do I assign items?)'. Below this is a yellow header labeled 'Source'. Underneath, there are four filter fields: 'Book/Source' (Urry/Cain/Wasserman/Minorsky/Reece, Ce), 'Chapter' (Introduction to MasteringBiology), 'Display By' (Section), and 'Section' (No Section Available). Below the filters is another yellow header labeled 'Item Filters and Answer Types'. Underneath, it says 'Select filters below to refine your search results. (How do I find accessible content?)' with a red box around the link and a red arrow pointing to it. Below this is a paragraph: 'Choosing across columns results in matches that meet both criteria, such as test bank items with the multiple choice answer type. To broaden your search, select multiple boxes within a column'. There are two checkboxes: 'Items with Feedback' and 'Item Difficulty' with a slider from 1 to 5. At the bottom, there are two sections: 'Item Types' and 'Answer Types'.

Labeling Answer Types have been converted from Flash to HTML5, improving accessibility and mobile enablement.

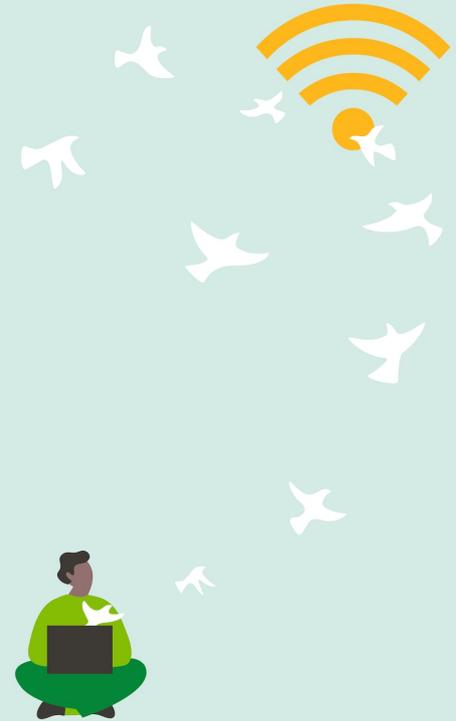
A link to information on how to find accessible content within Mastering will now appear in the Item Library

# Promoting Student Learning

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Educational and learning science research indicates that altering the conditions by which students encounter homework problems can **promote learning and mitigate cheating.**

Default settings within Mastering have been changed with a goal to keep students within the Mastering course using the help available to them when they need assistance.



# Promoting Student Learning

Changes to promote student learning include the placement of hints and altering the credit associated with hints to encourage student usage.

**Students Can View Hints:**

Always

- Give credit for correctly answering a question in a Hint.
- Give bonus credit for not opening a Hint.
- Deduct credit for opening a Hint.
- Deduct credit for exhausting all attempts or giving up on a question in a Hint.

Marieb, Human Anatomy & Physiology, 10e

Chemistry Review Tutorials > Nucleic Acid Building Blocks

Item Type: Tutorial | Difficulty: 3 | Time: 13m | Contact the Publisher

**Nucleic Acid Building Blocks**

The nucleic acids DNA and RNA are made from chains of nucleotides. Nucleotides consist of three components: a five-carbon sugar (either ribose or deoxyribose), a nitrogenous base attached to the sugar's 1'-carbon, and a phosphate group attached to the sugar's 5'-carbon.

**Part A - Components of nucleotides**

Sort these nucleotide building blocks by their name or classification.  
Drag each item to the appropriate bin.

▼ Hints

- Hint 1. Can you identify ribose? click to open
- Hint 2. Can you identify phosphate? click to open
- Hint 3. Can you identify a purine base? click to open

**Default Hint Penalty:** The default setting will be changed to remove the penalty to students' homework scores for using hints. As always, instructors can edit settings to reflect their preferences.

**Placement of Hints:** Rather than launching in a separate tab, hints will appear inline with the homework problems making hints appear as an integrated part of working through homework. The description of each hint as well as the hints themselves are more prominently displayed to better direct students to available assistance.

# Promoting Student Learning

Educational and learning science research indicates that assigning questions with enhanced, in-the-moment remediation support via hints and wrong-answer feedback can help mitigate cheating to promote learning. An Item Library filter allows faculty to easily identify tutorial questions (questions with hints and targeted wrong answer feedback). These questions encourage student use of hints as a means of keeping students within the Mastering course using the help available to them when they need assistance. With the new **Item Library Filter**, instructors will now be able to identify homework problems that provide students with Mastering's famed wrong-answer feedback.

### Item Library

Preview items available for assignment. ([How do I assign items?](#))

#### Source

Book/Source: Young/Freedman, University Physics with  
Chapter: 1. Units, Physical Quantities, and Vectors  
Display By: Section  
Section: All

#### Item Filters and Answer Types

Select filters below to refine your search results. Apply Filters

Choosing across columns results in matches that meet both criteria, such as test bank items with the multiple choice answer type. To broaden your search, select multiple boxes within a column for items that meet either criteria.

New Items    Mobile Items    Randomizable Items    **Items with Feedback**   Item Difficulty: 1 2 3 4 5

Item Types	Answer Types	Special Features
<input type="checkbox"/> Tutorial	<input type="checkbox"/> Essay	<input type="checkbox"/> Biology
<input type="checkbox"/> Coaching Activities	<input type="checkbox"/> Multiple Choice/Select	<input type="checkbox"/> Conceptual
<input type="checkbox"/> Reading Questions	<input type="checkbox"/> Numeric / Symbolic	<input type="checkbox"/> Math Review
<input type="checkbox"/> End-of-Chapter	<input type="checkbox"/> Ranking	<input type="checkbox"/> Pre-Lecture
<input type="checkbox"/> Test Bank	<input type="checkbox"/> Simple Text	<input type="checkbox"/> Quantitative
<input type="checkbox"/> My Items	<input type="checkbox"/> Sorting	<input type="checkbox"/> Videos/Animations
	<input type="checkbox"/> Vector/Moment	

# Dynamic Study Modules

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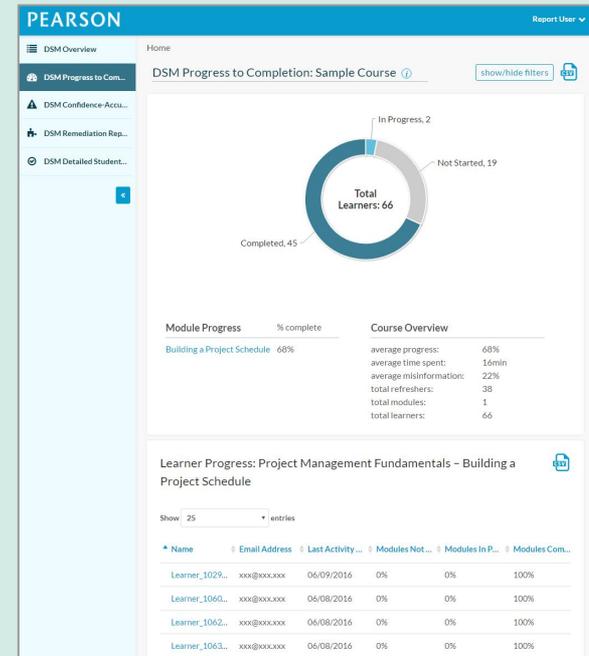
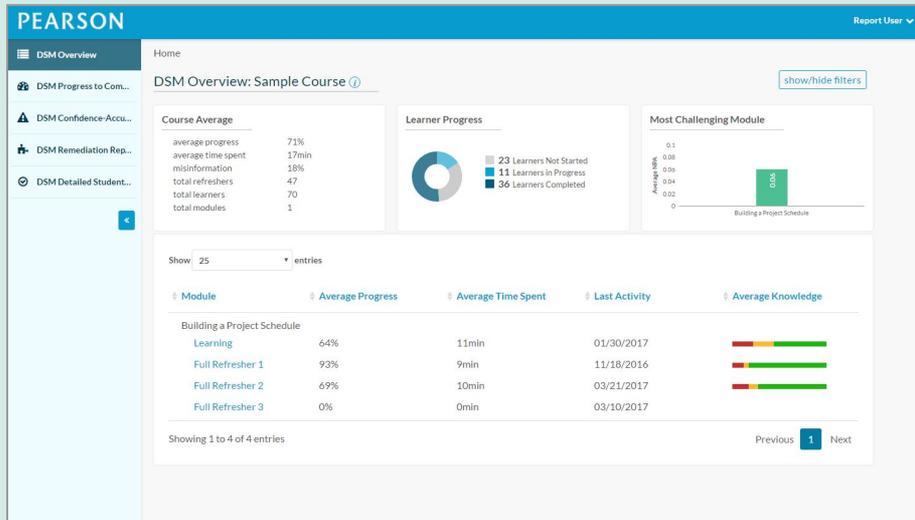
Dynamic Study Modules (DSMs) provide students personalized assistance by continuously assessing their activity and performance in real time. Summer 2017 updates introduce a student dashboard and expand instructor reporting capabilities, giving faculty easier insight into student, and class, mastery of concepts.



# Dynamic Study Modules

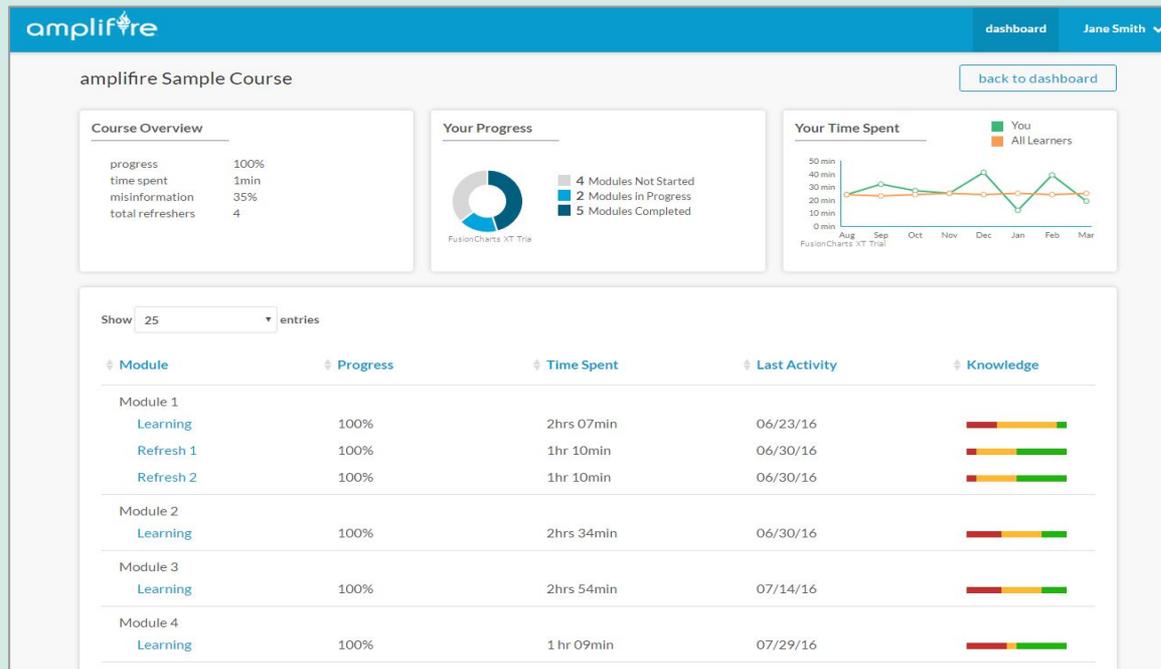
Five new DSM reports and dashboard views provide **instructors** with the following:

- A high-level summary of a class' aggregate performance
- Information on topics where students tended to answer questions incorrectly, but with a high degree of confidence
- An in-depth view into the activity of students who continue to answer questions incorrectly
- Insight on student progress towards completing assigned DSM activities
- Details on student's specific performance



# Dynamic Study Modules

New DSM reports provide **students** with a dashboard that reports student progress, initial knowledge, and time spent. Additionally, students will also have more flexibility in selecting their degree of confidence when answering questions. **Partial confidence** can now be selected for either two answer choices, or one answer choice.



# Learning Catalytics

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Summer 2017 updates for courses using Learning Catalytics include improved visibility and ease of access for students.



# Learning Catalytics

In addition to the new Learning Catalytics button on the student course home, which appears when an instructor selects the “Use with Students” option in Learning Catalytics, a Join Session option will also appear when an instructor launches a live session. This dynamic link ensures students have easy access to Learning Catalytics sessions.

The screenshot shows the MasteringBiology course home for 'Introduction to Science'. The interface includes a navigation sidebar on the left with options like 'My Courses', 'Course Home', 'Scores', 'eText 2.0', 'Dynamic Study Modules', 'Study Area', and 'Course Materials'. The main content area is titled 'Course Home' and features a 'Learning Catalytics' button with a 'Join Session' option, highlighted by a red box. Below this, there are sections for 'Announcements (1)' and 'Assignments (6)'. The announcements section includes 'Research paper due 7/1 on Darwin...' and 'No office hours June 4th - June 7th...'. The assignments section is divided into 'Past Due Assignments (3)', listing 'Homework 1: Logic and Observation', 'Homework 2: Heritable Information', and 'Chapter 1: Quiz 1'.

Assignment	Due Date	Time	Progress
Homework 1: Logic and Observation	06/02/17	12:00 PM	3 of 12 complete
Homework 2: Heritable Information	06/02/17	12:00 PM	3 of 12 complete
Chapter 1: Quiz 1	06/02/17	12:00 PM	

# Canvas Automatic Grade Sync

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MyLab instructors who have integrated their courses with Canvas have the option to select **automatic grade sync**, allowing for a seamless way to sync grade data between MyLab and their LMS.



# Canvas Automatic Grade Sync

Automatic grade sync saves time for instructors by transferring grades **completely touch-free**, eliminating the need to manually transfer grades. Instructors have the option to select all assignments or specific assignments to automatically sync.

The screenshot displays the Pearson Canvas interface for grade synchronization. The left sidebar contains navigation icons for Account, Dashboard, Courses, Calendar, Inbox, Help, and various course management tools. The main content area is titled 'PEARSON ALWAYS LEARNING' and features a 'Grade Sync' tool. A red box highlights a dialog asking 'Do you want to sync grades automatically?' with radio buttons for 'Yes' and 'No'. Below this is a table of assignments with checkboxes for selection.

Item Name
<input type="checkbox"/> Section 7.2 Homework
<input checked="" type="checkbox"/> Section 5.4 Homework
<input checked="" type="checkbox"/> Section 4.3 Homework
<input checked="" type="checkbox"/> Section 1.2 Homework
<input checked="" type="checkbox"/> Section 7.1 Homework
<input checked="" type="checkbox"/> Section 5.2 Homework
<input type="checkbox"/> Section 4.4 Homework
<input type="checkbox"/> Section 5.5 Homework
<input type="checkbox"/> Section 3.2 Homework
<input type="checkbox"/> Section 5.6 Homework
<input type="checkbox"/> Section 8.4 Homework
<input type="checkbox"/> Section 3.1 Homework
<input type="checkbox"/> Section 2.5 Homework
<input checked="" type="checkbox"/> Section 1.1 Homework
<input type="checkbox"/> Section 4.2 Homework

# Discipline-Specific Updates

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The following updates apply to specific disciplines for  
Mastering



# NEW! Interactive Physiology 2.0 Modules

**Interactive Physiology 2.0** helps students advance beyond memorization to a genuine understanding of complex physiological processes. Full-color animations and videos demonstrate difficult concepts. Interactive Physiology 2.0 also features brand new graphics, quicker navigation, and more robust mobile-ready interactivities where students can explore, experiment, and predict.

The screenshot shows the 'Cardiac Output' module interface. At the top left is the 'ip2 Cardiac Output' logo, and at the top right is a 'Glossary' link. Below the header is a 'Go to quiz' button. The main content area includes a text box on the left that says 'Reset the activity to earn additional medals by selecting Heart Rate and Stroke Volume combinations that produce cardiac outputs typical of walking, jogging, or running.' To the right of the text are three interactive panels: 1) A monitor displaying a graph of 'Ventricular Volume (ml)' over 'Time' with a 'Lvl = 0.2 sec' indicator. 2) A 'Progress Award' panel showing four medals (Gold, Silver, Bronze, and a fourth one). 3) A 'Cardiac Output' control panel with 'Select Heart Rate' buttons (60, 75, 100, 150, 190) and 'Select Stroke Volume' buttons (70, 80, 90, 100), along with a 'Submit' button. To the right of these panels is a 3D anatomical model of a heart and a red graduated cylinder with a funnel on top, labeled with volume markings from 0.5 to 2.0 L.

## New IP 2.0 modules include:

- Cardiac Cycle
- Glomerular Filtration and Neuromuscular Junction

*\*All Interactive Physiology 1.0 modules will be available as IP Animations for Fall 2017 classes*

# NEW! Ready-to-Go Teaching Modules

Created by teachers for teachers, **Ready-to-Go Teaching Modules** are a set of curated teaching resources that highlight the most effective and engaging animations, videos, quizzing, coaching, and active learning activities from Mastering A&P. Ready-to-Go Teaching Modules save instructors time while supporting active learning experiences both inside and outside of class.

## In-Class Activities

Customize your class by selecting from among these in-class activities:

### 1 Drawing Exercise

In this activity, students will draw out the sequence of events that occur during an action potential in a neuron. The downloadable Word document includes a procedure for this activity and an example of how the neuron sketch might look.

 Remembering/  
Understanding  
*Bloom's Level*

 5-10 minutes  
*Average time for activity*

 **Neurophysiology  
Drawing Exercise**

## Titles Available with Ready-to-Go Teaching Modules:

Martini, Fundamentals of A&P 11/e  
Martini, Visual A&P 3/e  
Martini, Human Anatomy 9/3

# NEW! Interactive Pre-Lecture Videos

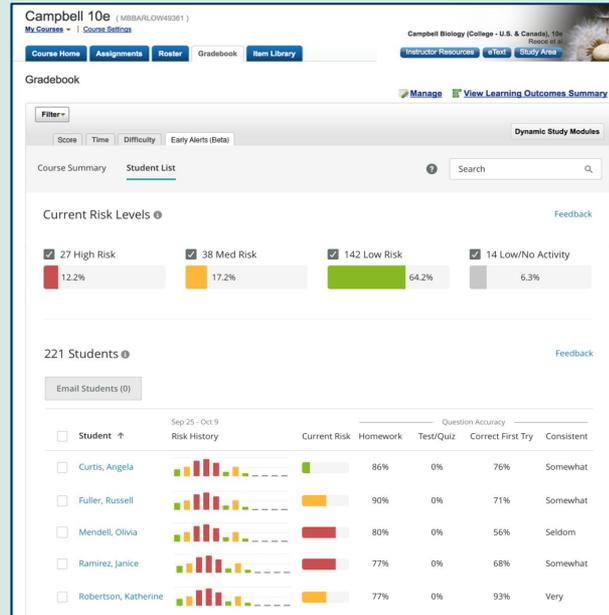
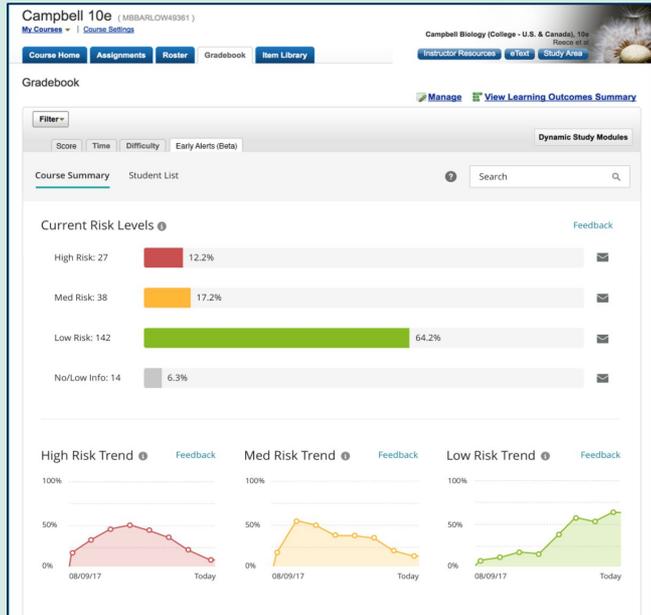
**Interactive pre-lecture videos** provide subject overview for exposure to key concepts before class, opening the classroom time for active learning or deeper discussions of topics. These can be used for simple pre-class exposure or fully flipped classrooms.



# Early Alerts (Beta release-Biology)

**BIOLOGY**  
All Majors Bio titles:  
Campbell 10e & 11e;  
Focus 1e & 2e,  
Freeman 5e & 6e

The goal of Mastering Early Alerts is to help improve course retention rates by identifying students who may be struggling as early as possible. This early identification highlights for instructors where additional interventions or remediation may be needed. The Summer 2017 release features enhanced reporting on student performance that analyzes student homework and quiz scores, percentage of items answered correctly on the first attempt, and consistency in percentage correct on first attempt.



# NEW! Ready-to-Go Teaching Modules

Created by teachers for teachers, **Ready-to-Go Teaching Modules** are a set of curated teaching resources that highlight the most effective and engaging animations, videos, quizzing, coaching, and active learning activities from Mastering Biology. Ready-to-Go Teaching Modules save instructors time while supporting active learning experiences both inside and outside of class.

Campbell Biology in Focus, Second Edition  
**Ready-To-Go Teaching Modules**

Ready-To-Go Teaching Modules provide instructors with easy-to-use teaching tools for the toughest topics in General Biology.

Action ready-made BEFORE CLASS

 Oxidative Phosphorylation CONCEPT 7.4	 The Light Reactions CONCEPT 8.2
 Mitosis	 Meiosis

## Titles Available with Ready-to-Go Teaching Modules:

- All three majors titles - Campbell Biology 11/e, Campbell in Focus 2/e, Freeman Biological Sciences 6/e
- Campbell Concepts and Connections 9/e

# Darwin's Finches in Galapagos

## Videos

NEW! Filmed and narrated by Peter and Rosemary Grant, the Darwin's Finches in Galapagos videos provide an amazing look at the Grants' decades of evolutionary research. These **six assignable videos** will help your students explore and better understand topics such as speciation, natural selection, ecological niches, hybridization, and competition. These videos also highlight the scientific process of studying biology in the field and allow students to demonstrate mastery of the key concepts related to evolution and ecology.



# GraphIt

NEW! GraphIt activities are designed to help students read, interpret, and create graphs that explore real issues and use real data.

The screenshot displays the GraphIt mobile application interface. On the left is a dark sidebar with a table of contents. The main content area shows a pie chart titled 'Vegan Diet' with a corresponding key. The pie chart is divided into several segments: a large yellow segment for 'Cereals, breads', a cyan segment for 'Vegetables', a light blue segment for 'Fruit', a green segment for 'Oils, spreads', a purple segment for 'Snacks, sugar', and a small blue segment for 'Drinks'. The key lists the following categories with color-coded squares: Beef, lamb (red); Chicken, fish, pork (orange); Dairy (yellow); Cereals, breads (yellow); Vegetables (light green); Fruit (green); Oils, spreads (cyan); Snacks, sugar (light blue); Drinks (blue). The interface also includes a top navigation bar with 'GLOSSARY' and 'CREDITS', a text description of the diet, and filter buttons for 'Vegetarian', 'No Beef', 'Average', and 'Meat Lover'. The bottom of the screen shows 'Page 3 of 23', 'Previous', 'Next', and the Pearson logo with the tagline 'ALWAYS LEARNING'.

Item
1. Thinking About Food Consumption
2. Introduction: Energy Use and Food Production
3. Learning Objectives
4. Data Analysis Part I: Carbon Footprint of Food Products
5. Building Graphs Part I
6. Interpreting Graphs Part I
7. Data Analysis Part II: CO <sub>2</sub> Emissions per Calorie Consumed
8. Building Graphs Part II
9. Interpreting Graphs Part II
10. Making Connections

**Vegan Diet**

Category	Color
Beef, lamb	Red
Chicken, fish, pork	Orange
Dairy	Yellow
Cereals, breads	Yellow
Vegetables	Light Green
Fruit	Green
Oils, spreads	Cyan
Snacks, sugar	Light Blue
Drinks	Blue

### 3 available this fall in mobile-friendly format

- Carbon Footprint of Food Consumption (live now)
- Water Availability, Access, and Demand (live end of June)
- Ocean Acidification (live early August)

# Current Event Activities

Current Event activities will now draw from *Science Daily* (NEW) and *The New York Times*, giving students access to up-to-the-minute topical stories related to Biology and Environmental Science.

The screenshot shows the 'biology the core' website interface. At the top, it says 'ERIC J. SIMON' and 'biology the core 2nd Edition'. Below that is a navigation bar for 'Chapter 1: An Introduction to the Science of Life' with a 'GO' button. On the left is a 'STUDY AREA' sidebar with options like 'Chapter Guide', 'Practice Test', 'Word Study Tools', 'Current Events', 'eText 2.0', 'BioFix', 'Everyday Biology Videos', 'ABC News Videos', 'MP3 Tutor Sessions', 'Video Tutor Sessions', 'Cumulative Test', 'Guided Reading Activities', and 'Get Ready for Biology'. The main content area is titled 'Current Events' and includes an introductory paragraph and a list of articles categorized by chapter.

**Current Events**

To aid in your critical thinking on current biology topics, check this page each semester for newly updated *New York Times* articles.

Registration with *The New York Times* provides instant access to breaking news on NYTimes.com. To register, go to <http://www.nytimes.com/register>. Visit <http://www.nytimes.com/content/help/rights/terms/terms-of-service.html> to review the current NYT Terms of Service.

Chapter 1:	Argentina Battles Major Outbreak of Dengue as Mosquito Population Swells
	The Virus Detectives
	Why Flunking Exams Is Actually a Good Thing
Chapter 2:	Making Sense of the Chemistry That Led to Life on Earth
	Protein May Hold the Key to Who Gets Alzheimer's (3/19/2014)
	Under Icy Surface of a Saturn Moon Lies a Sea of Water, Scientists Say (4/3/2014)
	With New Nonstick Coating, the Wait, and Waste, Is Over
Chapter 3:	A Microscopic Issue of Unknown Consequences
	Dietary Supplements Lead to 20,000 E.R. Visits Yearly, Study Finds
	For Athletes, the Risk of Too Much Water
	No, You Do Not Have to Drink 8 Glasses of Water a Day
	Officials Admit a 'Defeat' by Ebola in Sierra Leone
	The Trials of Stem Cell Therapy
Chapter 4:	Food Is a Death Sentence to These Kids'
	What's New in the Dietary Guidelines

# NEW! Learning Catalytics Question Library for Earth Science

EARTH  
SCIENCE

New **Learning Catalytics** question library dedicated to Earth Science helps instructors to generate class discussion, customize lectures, and promote peer-to-peer learning with real-time analytics. As a student response tool, Learning Catalytics uses students' smartphones, tablets, or laptops to engage them in more interactive tasks and thinking.

The screenshot displays the Learning Catalytics question library interface. On the left, there are filters for 'Only show:' (Pearson content), 'Discipline:' (Earth Science), 'Format:', and 'Added by:'. The 'Discipline:' dropdown is open, showing a list of subjects including Geography, Meteorology, Physical Geography, World Regional Geography, Geology, Earth Science, Oceanography, Physical Geology, Health & Nutrition, and Health & Fitness. On the right, there is a search bar labeled 'Search question library'. Below it, a 'Show 5 entries' section lists five question types: numerical, word cloud, multiple choice, region, and confidence. Each entry includes a checkbox, a star icon, the question type name, a brief description of the question, and an '+ Add to module' link. At the bottom, a summary bar shows 'Showing questions 1-5 of 369' and navigation links for 'Previous' and 'Next'.

Only show: Pearson content

Discipline: Earth Science

Format:

Added by:

Geography

Meteorology

Physical Geography

World Regional Geography

Geology

Earth Science

Oceanography

Physical Geology

Health & Nutrition

Health & Fitness

Search question library

Show 5 entries

- ★ numerical [+ Add to module](#)  
What percentage of total global water is comprised of glaciers and ic...
- ★ word cloud [+ Add to module](#)  
Name a specific nonsilicate mineral.
- ★ multiple choice [+ Add to module](#)  
As CO2 content in the atmosphere increases,
- ★ region [+ Add to module](#)  
Select the emergent coast from the two circled coasts in the map.
- ★ confidence [+ Add to module](#)  
Active continental margins differ from passive continental margins in...

Showing questions 1-5 of 369 Previous 1 2 3 4 5 ... 74 Next

[+ Add checked questions to module](#)

# Interactive Figures for Hibbeler's *Mechanics of Materials, 10/e*

ENGINEERING

New interactives for Hibbeler's *Mechanics of Materials, 10/e* are assignable and located within the Item Library with concept questions tied to each. These interactives bring difficult concepts to life with highly-visual representations to help students better visualize course concepts that are difficult to convey with static images.

Item Type: Coaching Activities | Difficulty: 1 | Time: 3m | [Learning Outcomes](#) | [Contact the Publisher](#) | Manage this Item: Standard View

### Interactive Figure: Tension and Compression Test

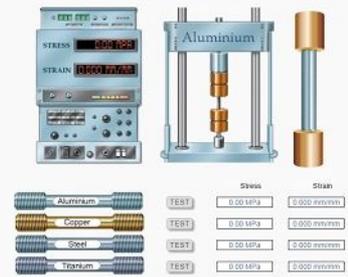
Launch [the simulation](#), then answer the question.

#### Tension and Compression Test

A **tension test** is used to determine the strengths of different materials. A load is placed on a material of uniform size and shape until there is failure.

In this activity, you will select a specimen to test and observe the following when a load is applied to the specimen:

1. The stress on the specimen.
2. The strain on the specimen.
3. Failure of the specimen.



	Stress	Strain
Aluminum	TEST 0.00 MPa	0.000 mm/mm
Copper	TEST 0.00 MPa	0.000 mm/mm
Steel	TEST 0.50 MPa	0.000 mm/mm
Titanium	TEST 0.00 MPa	0.000 mm/mm

#### Part A

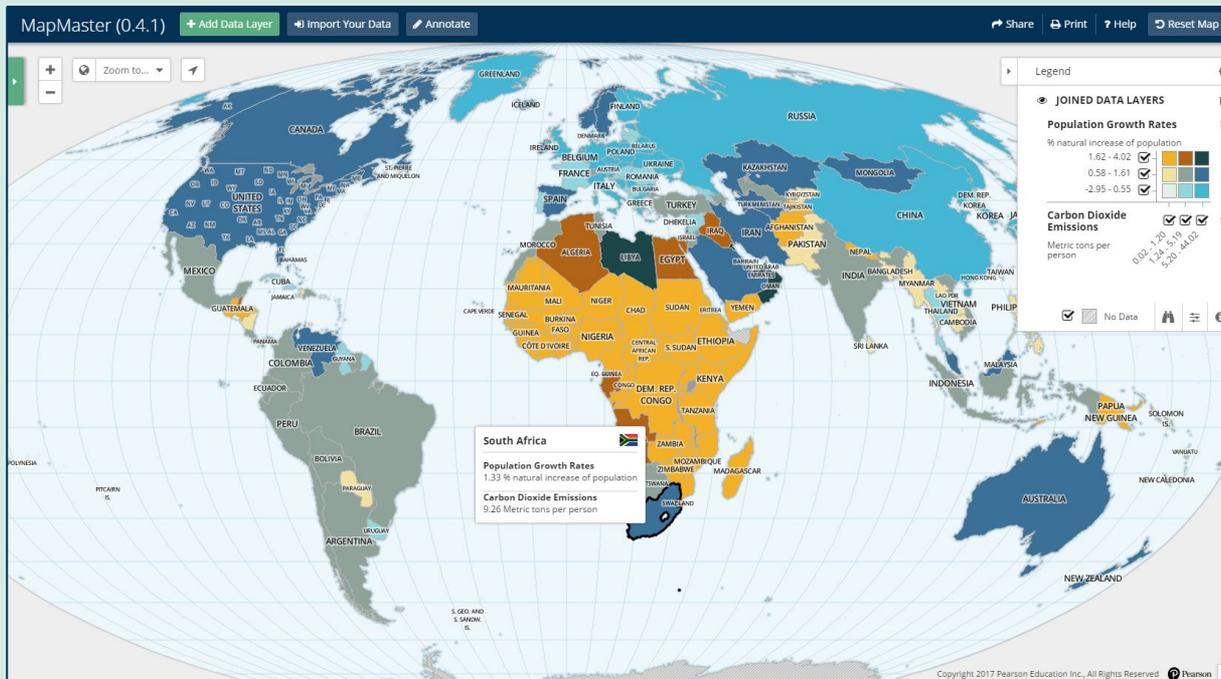
A student claims that titanium is the strongest material to fracture. Based on this interaction, which evidence would **best** support the student's claim?

- Titanium increases its fracture strength as the load increases.
- Titanium deforms the least before fracture.
- Titanium has the highest fracture stress value.
- Titanium takes the longest time to reach fracture.

[Submit](#) [My Answers](#) [Give Up](#)

# NEW! MapMaster 2.0

NEW MapMaster 2.0 activities are inspired by GIS and allow students to layer various thematic maps to analyze spatial patterns and data at regional and global scales. Now fully mobile, activities include enhanced analysis tools, such as split-screen maps, the ability for students to geolocate themselves in the data, and the ability for students to upload their own data for advanced map making. This tool includes zoom, and annotation functionalities, with hundreds of map layers leveraging recent data from sources such as NOAA, NASA, USGS, CIA, World Bank, the UN, UNESCO, and more.



# New Assignable Labs for Hobson's *Get Fit, Stay Well!*, 4/e

25 labs are now available as auto-graded, assignable labs within Mastering Health, saving instructors valuable grading time.

**NEW! Autograded Labs: Muscular Endurance - The Push-Up and Curl-Up Tests**

**Part A - Recording the Date and Your Age**

Record the test date and your age in the essay box below:

Essay answers are limited to about 500 words (3800 characters maximum, including spaces).  
3800 Character(s) remaining

[Submit](#) [My Answers](#) [Give Up](#)

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**The Standard Push-Up Test**

[Click here to view a demonstration video of the push-up test.](#) Perform the standard push-up test as follows:

1. Position yourself on the ground in push-up position (see Figure a below). (Note that you can instead use the modified push-up position shown in Figures c and d below.) Place your hands about shoulder-width apart, and extend your legs in a straight line with your weight on your toes.
2. Lower your body until your chest is within 1 to 2 in off the ground (Figure b), and raise yourself back to the up position. Be sure to keep your back straight and to lower your entire body as a unit.
3. Select a partner to count your push-ups and time your test (test duration is 60 sec). Warm up with a few push-ups, and rest for 2 to 3 min after the warm-up to prepare for the test.
4. When your partner says "Go," start performing push-ups. Have your partner count your push-ups aloud, and ask him or her to let you know periodically how much time remains.



**(a)** **(b)**

[Click here to view a demonstration video of the standard push-up.](#)

# MyDietAnalysis

MyDietAnalysis Personalized Dietary Analysis Activities take the work out of grading students' diet analysis projects. These Activities take the most commonly assigned components (e.g., analyze your carbohydrate intake, your fat-soluble vitamins intake, etc.) and auto-grade them -- reducing instructors' grading time.

The screenshot displays a web browser window with the URL <https://session.masteringhealthandnutrition.com/myct/itemView?assignmentProblemID=4748706>. The page title is "Diet Analysis Prototype Assignments" and the user is signed in as "Michelle Cadden, Instructor". The current activity is "MyDietAnalysis Personalized Dietary Analysis: Carbohydrate Intake".

**Item Type:** Activities | **Difficulty:** -- | **Time:** -- | [Contact the Publisher](#) | **Manage this Item:** Standard View

soft drinks, and coffee creations), condiments (like ketchup, mustard, and cream), and snacks (like candy, chips, a granola bar, and an apple). Be careful in making your choices from the MyDietAnalysis food database so that the final reports you generate are accurate. Try to select items that as are close as possible to what you consumed. If the food item does not exist in the MyDietAnalysis food database (such as a certain restaurant sandwich or a serving of your favorite homemade casserole), then you may be able to build it from individual ingredients.

Since your dietary intake is unique, all reasonable answers will be accepted as correct.

**Part A**

How many grams of carbohydrates did you consume on average per day over the 3 days? (See the Actual Intakes vs. Recommended Intakes Report with all days checked.)

Enter the number of grams of carbohydrates rounded to the first decimal place in the box below.

The logo features the text "MyDiet Analysis" in a stylized font, with a green apple icon to the left. Below the logo is a text input field containing the letter "g".

[Submit](#) | [My Answers](#) | [Give Up](#)

**Part B**

What percent of the recommended amount of carbohydrates did you consume on average per day over the 3 days?

- less than 20%
- 20% to 29%
- 30% to 39%
- 40% to 49%
- 50% to 59%
- 60% to 69%

# Interactive Activities for Lynch's *Choosing Health, 3/e*

New interactive drag-and-drop activities for Lynch's *Choosing Health, 3/e* are now built into eText 2.0, helping students dive deeper into the content in an engaging, meaningful way.

**Your Body, Your Brain, and REM Sleep**

**Interactive**

Your body and brain experience varying types of activity at different stages of sleep. In this activity, you'll identify three stages of sleep.

To start the Challenge, choose Start Term Challenge, or Start Definition Challenge.



		Light Sleep	Deep Sleep	REM Sleep	
		Brain activity is just starting to slow down after you've drifted off.	Brain waves get tall and slow; breathing and pulse slow even more; blood pressure drops.	Dreams occur; brain wave activity is somewhat similar to that of someone awake; eyes move rapidly.	

Start Term Challenge      Start Definition Challenge

# Physics Primer

The **Physics Primer** is a series of tutorials that remediate key math skills needed in Introductory Physics courses by providing videos, hints, and feedback. These tutorials are assignable before the course and throughout its duration to ensure students are up-to-speed with their math skills within the context of physics analysis.

The screenshot shows a web-based physics tutorial interface. At the top, it says "MP Math Primer Review" and "Signed in as Elizabeth Ellsworth Bell, Instructor". The main title is "Understanding Vectors and Vector Components - Version 3".

**Learning Goal:**

- To describe what characterizes vectors and distinguish these objects from scalars.
- To understand the meaning of vector components and to be able to calculate them.
- To calculate the magnitude and direction of vectors.

Vectors are defined as objects with magnitude (length) and direction. Geometrically, they can be represented as arrows. In physics, mathematics, and engineering, these arrows can represent quantities such as displacements, velocities, and forces.

Components, the lengths in the  $x$  and  $y$  directions of the vector, are a different way to define vectors. In this problem, you will learn about components, by first considering an example that can arise in everyday life. You will also learn to determine the magnitude and direction of a vector.

The video below gives a brief introduction to **vectors and vector components**.

**Vector Components**

$\vec{A} = A_x\hat{i} + A_y\hat{j}$

**Part A**

Consider the vector  $\vec{b}$  shown below, with a magnitude of 4.00 m and pointing at an angle  $23.5^\circ$  north of east. What is the  $x$ -component  $b_x$  of this vector?

$b = 4.00 \text{ m}$

$23.5^\circ$

Express your answer in meters to three significant figures.

$b_x =$

**Submit** **Hint** **My Answers** **Give Up** **Review Part**

**Part B**

This question will be shown after you complete previous question(s).

Instructors: [View all hidden parts](#)

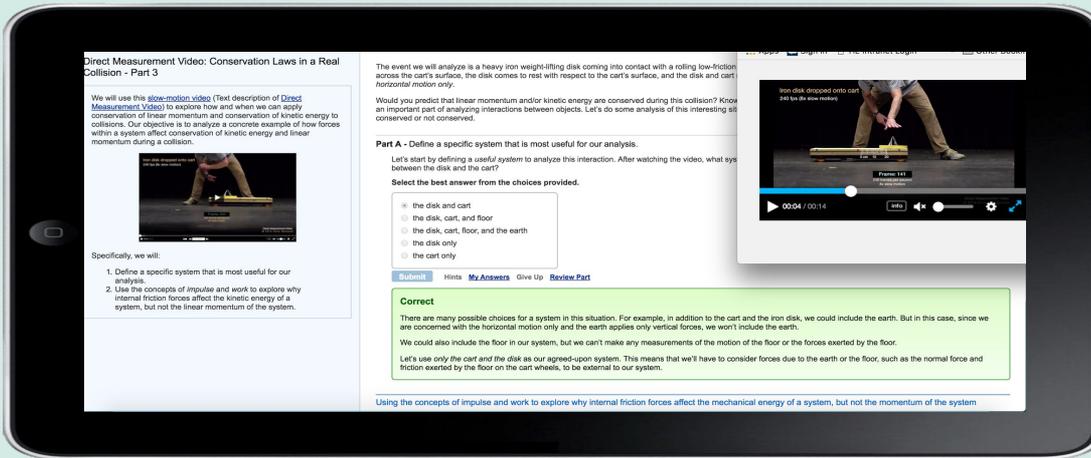
**Hint 1.** How to approach the problem [\(click to open\)](#)

**Hint 2.** Watch a video with a similar problem being solved [\(click to open\)](#)

**Hint 3.** Try a similar problem on your own [\(click to open\)](#)

# Direct Measurement Videos

Direct Measurement Videos are brief, high-impact videos that demonstrate real physical phenomena that students can use to learn and apply physics concepts. Grids, rulers, and frame-counters appear as overlays on the video, enabling students to make precise measurements of quantities such as position and time. Students then apply these quantities along with physics concepts to solve problems and answer questions about the motion of the objects in the video. The problems can be used to replace or supplement traditional word problems, or as open-ended questions to help develop problem solving skills.

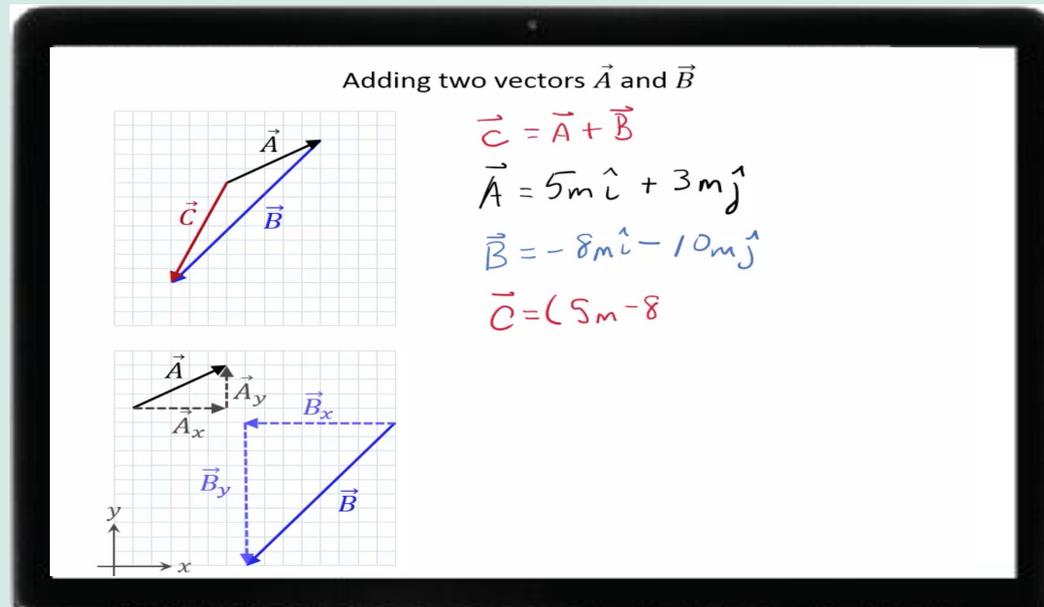


## TOPICS FOR FALL 2017:

1. Coulomb force 1 (force vs distance)
2. Coulomb force 2 (force vs charge)
3. Energy
4. Faraday's Law of Induction
5. Fluids
6. Freefall
7. Newton's Second Law (force, mass, acceleration)
8. Optics
9. Projectile Motion
10. Resistivity 1
11. Resistivity 2
12. Rotational Dynamics
13. Simple Harmonic Motion
14. Waves

# Quantitative Pre-Lecture Videos

**Quantitative Pre-lecture Videos** are interactive videos that can be assigned prior to class as a complement to Conceptual Pre-lecture Videos, giving students exposure to concepts before class and helping them learn how problems for those concepts are worked.



ALWAYS LEARNING