Helping A&P Students Succeed
Using Supplemental Courses to Reinforce Concepts and Promote Learning Skills

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Group discussion

True or false?
1. It’s easy to teach my students what they need to know about A&P in one or two semesters.
2. My students are well prepared to take my A&P course.
3. My students possess excellent learning skills.

Two things may be missing

<table>
<thead>
<tr>
<th>Subject preparation</th>
<th>Learning skills</th>
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<tbody>
<tr>
<td>Science</td>
<td>Reading comprehension</td>
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<tr>
<td>Chemistry</td>
<td>Listening and note taking</td>
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<tr>
<td>Basic cell biology</td>
<td>Memorization</td>
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<tr>
<td>Metabolism</td>
<td>Acquiring and using vocabulary</td>
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<tr>
<td>Body organization</td>
<td>Active studying &amp; practice</td>
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<tr>
<td>Genetics</td>
<td>Problem-solving</td>
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<td>Taking tests</td>
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Foundations in Science for Health Careers

Developmental (remedial) course
Not for “credit”
Pass/fail (C or better is passing)
One-hour-equivalent course
Offered during 1-wk, 4-wk, 8-wk mini-mesters
Counts as A&P prerequisite for those with expired prereqs
Randomized online tests
Taken as many times as it takes to pass
Cannot move to next topic until concepts are mastered
Cumulative content
Outlines, readings, audio summaries, tutoring available as needed

Topics
Science Basics
Introductory Chemistry
Biological Chemistry
Introduction to Cells
Cell Transport
Getting Energy
Making Proteins
Introductory Genetics
Tissues
The Human Body

Student attitudes (n=12)
100% would recommend this course to other students

A&P 1 Supplement

One-credit class
A, B, C, D, F grade
Optional
Taken at same time as A&P 1 Lec/Lab
Offered all semesters A&P 1 is offered
One 100-minute session per week  
   Doubled from 50-min sessions by request  

Class structure  
   Each class begins with “trouble spots”  
   Each student hands in a card with a question  
   Followed by a “study skill” focus  
      Flash cards  
      Concept maps  
      Running concept list  
      Test strategies  
      How to dissect  
      Memorizing  
      Science terminology  
      Reading strategies  
   Ends with active learning “practice”  
      Paper dissections  
      Anatomy identifications with clickers  
      Concept mapping  

Online “check in” each week  
   Quiz format survey of study activities & issues  
   Emphasizes that studying is ongoing, not something you do the night before a test  
   Gets students in the habit of watching their own progress  
   Reminds students what resources and strategies are available to them  

Grading  
   Online check-in  
   Weekly assignments  
      Cards turned in  
      Portfolio  
   Participation  
      Student response system (clickers)  

Not-so-obvious benefits  
   Networking with other students  
   More contact with A&P faculty  
   Makes studying more efficient  
   Fixes little problems before they get to be big problems  

Student attitudes (n=33)  
   85% would recommend the supplement course to incoming A&P 1 students  
   97% found the study tip focus somewhat (30%) or very (67%) helpful  
   100% found the content-specific help somewhat (27%) or very (73%) helpful  
   94% found the informal chats/discussions to be somewhat (18%) or very (76%) helpful  
   52% found the online check-ins to be helpful  

Considerations  
   Faculty time (work load)  
   Scheduling / space  
   Academic advising  
   Curriculum issues  
   Student issues  

Can we fix everyone?

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