

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

Subject preparation

- Science
- Chemistry
- Basic cell biology
- Metabolism
- Body organization
- Genetics

Learning skills

- Reading comprehension
- Listening and note taking
- Memorization
- Acquiring and using vocabulary
- Active studying & practice
- Problem-solving
- Taking tests

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?