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# Medical Gross Anatomy for Large Classes in a 'Flipped' Classroom

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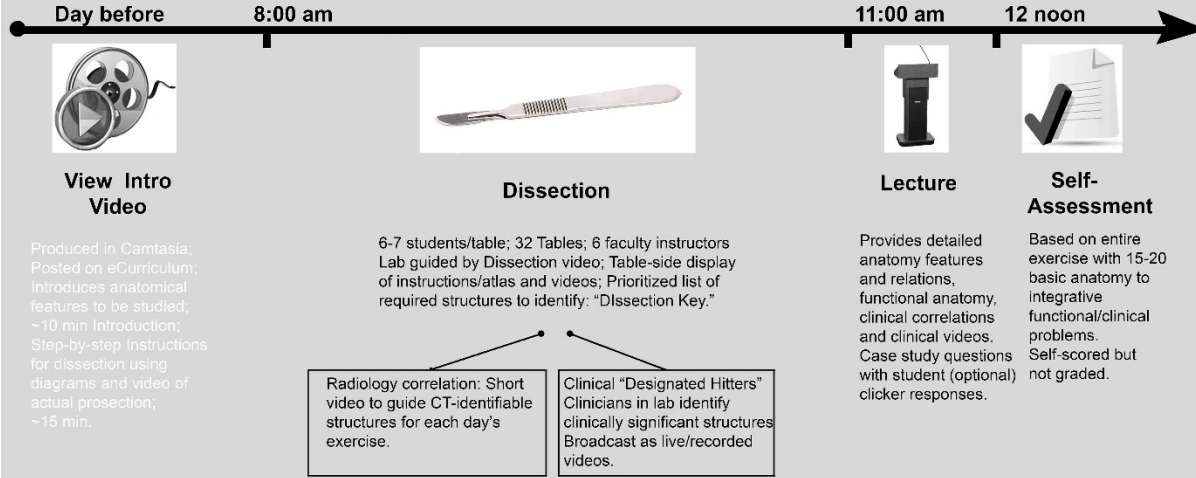


# VCU Medical Gross Anatomy for Large Classes in a “Flipped” Classroom

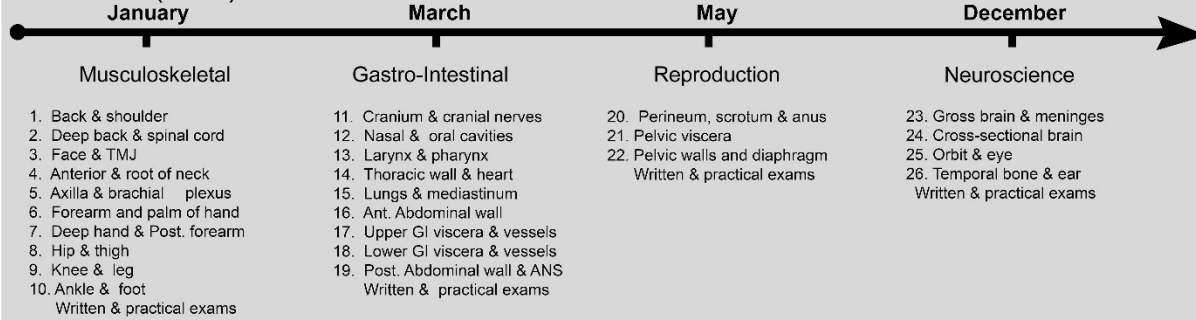
MA Meredith<sup>1</sup>, JL Dupree<sup>1</sup>, HR Clemo<sup>1</sup>, MJ McGinn<sup>1</sup>, DG Simpson<sup>1</sup>, KO Kreutzer<sup>2</sup>, SR DiGiovanni<sup>2</sup>  
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**Objective:** Teach 3-D map of human body to >210 medical students in 26 systems-based sessions using a C3-favored format.

## Session timeline



## Sessions (1-26)



## Cadaver Rounds: A self-directed longitudinal exercise



**Physical Exam**  
 An autopsy-like survey of cadaver’s physical features

**Whole-body CT scan**  
 Students transport cadaver to hospital Radiology for scanning prior to first day of lab

**“Patient” Charts**  
 Daily records of significant anatomical, anomalous or clinical findings during dissection.

**Clinical Correlation Videos**  
 Daily videos of clinicians presenting clinical correlations pertaining to the anatomy being examined that day.



**Path sample**  
 Anomalous tissue can be excised and submitted for Pathology evaluation and photomicrography.

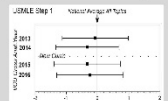
**Final Group Presentation**  
 Grand Rounds style 12 minute group presentation that identifies a significant health-related phenomenon their cadaver likely experienced. This self-directed exercise integrates info from CTscans, path reports, dissections, lectures and other coursework and is scored by anatomy and clinical faculty.

January  
MS  
GI  
Repr  
Neur  
December

## Outcomes and Conclusions:

High student evaluations (1.7-1.75 out of 2 pts; data from pre-curriculum change not available/comparable).

Despite 36% loss of course student contact time, scores on USMLE Step 1 for Anatomy did not decline from those of pre-curriculum change courses.



These data indicate that a flipped classroom can accommodate reduced course contact time and content yet maintain student learning and performance in medical gross anatomy.