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

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2. Deep back & spinal cord

4. Anterior & root of neck

5. Axilla & brachial plexus

Forearm and palm of hand

7. Deep hand & Post, forearm

Written & practical exams

3. Face & TMJ

8. Hip & thigh

9. Knee & leg

10. Ankle & foot

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

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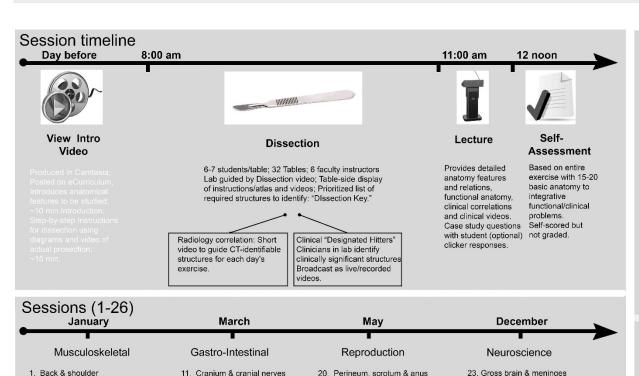
24. Cross-sectional brain

26. Temporal bone & ear

Written & practical exams

25. Orbit & eve

Objective: Teach 3-D map of human body to >210 medical students in 26 systems-based sessions using a C3-favored format.



21. Pelvic viscera

22. Pelvic walls and diaphragm

Written & practical exams

12. Nasal & oral cavities

14. Thoracic wall & heart

15. Lungs & mediastinum

17. Upper Gl viscera & vessels

18. Lower Gl viscera & vessels

19. Post, Abdominal wall & ANS

Written & practical exams

16. Ant. Abdominal wall

13. Larynx & pharynx

#### Cadaver Rounds: A selfdirected longitudinal exercise

### Physical Exam

An autopsy-like survey of cadaver's physical features

MS

GI

Repr

Neur

#### 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.

#### **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.



