I Have How Many Students?

Effective Methods for Engaging (and Surviving) The Large and Mega Lecture Classroom

Mary Poffenroth, M.S.
Department of Biological Sciences
The Large/Mega Lecture Classroom Defined

- Slightly ambiguous
- Large ~ 125 +
- Mega ~ 300 +
My Largest Class: ~400
You Need Support

- Support of your chair
- Additional WTUs
- Support staff: ISAs/Graders
Why Do I Teach Such Large Classes?

Strategic Impact
Leverage: Civic Engagement

Since 2009, over 2,500 students have volunteered nearly 10,000 work hours to local, environmental non-profit organizations.
Pick A Few Major Themes & Repeat Often

1. Environmental Conservation
2. Diet & Nutrition
3. Physical Fitness
Bio 21: Effective and Efficient Learning Strategies

© 2013 Poffenroth

May not be reposted, published or distributed without explicit permission from the author.

What to do to be successful in Bio 21:

- Attend every lecture: Try your best to be present and engaged: See tips below
- Read your class announcements in Canvas and all emails
- Read your syllabus and be aware of the schedule
- Complete all assignments
- Begin to prepare for exams early (i.e. weeks before, not days before, and especially not the night before)
- Take notes in lecture – do not rely solely on PowerPoint slides – those are just a foundation
- Carefully read and follow all instructions released to you and meet deadlines: Some of the most common complaints from employers of recent college grads are that they do not carefully read/follow instructions and find meeting deadlines challenging. Creating good work habits now will make you even more competitive when entering into your chosen career fulltime.
- Our brain has a vast array of pathways for visual, auditory, and kinesthetic (touch) sensory input. Therefore, the more pathways you use the greater chance you will remember the information. Try to include as many sensory organs as you can while learning to increase retention in both your short term and long-term memories.

Preparing for The Exam

Exams will consist of roughly 80% from lecture material and 20% from labs, “science stories” reading from the textbook and videos/activities assigned outside of lecture. There are never any surprises on the exams. Everything that is on the exam has been previously given to you in verbal, written or visual format.

Start as early as possible on the study guide. Once you are done with the study guide, break your study time into pieces and try to study a little each day. Take out your study guide and read while waiting in line for the bus or coffee. Even five minutes here and there can make a big impact!
Extremely Detailed Syllabus

Clear policies on:

- Makeup Exam / Quiz
- Grade discrepancy timelines
- Classroom protocol
- Email/Peer etiquette
Training Your ISA Team To Be Leaders

Thorough Training / ISA Handbook

- Guidelines
- Expectations
- Consequences
Training Your ISA Team To Be Leaders

• Leadership Opportunities:
  • New ISA
  • Peer Mentor ISA
  • Lead ISA
In Lecture Engagement:
Small Group Discussion

Hot Topics Rooted in Academics

Are Men the Weaker Sex?
Contrary to cultural assumptions that boys are stronger and sturdier, basic biological weaknesses are built into the male of our species. These frailties leave them more vulnerable than girls to life's hazards, including environmental pollutants such as insecticides, lead and plasticizers.

Feb 18, 2014  By Alice Shobacoff and Environmental Health News

We can, thankfully, remove one threat to the future existence of the human male from our worry list: The male Y chromosome, after dwindling from its original robust size over millions of years, apparently has halted its disappearing act.

But don't start cheering yet. Contrary to cultural assumptions that boys are stronger and sturdier, basic biological weaknesses are built into the male of our species. These frailties leave them more vulnerable than girls to life's hazards, including environmental pollutants such as insecticides, lead and plasticizers that target their brains or hormones. Several studies suggest that boys are harmed in some ways by these chemical exposures that girls are not. It's man's fate, so to speak.

First of all, human males are disappearing. Mother Nature has always acknowledged and compensated for the fragility and loss of boys by arranging for more of them: newborns faint to two females and nine males over the course of human history. Of course,
Want to Have a Hookup? What Does It Mean?

Sept. 21, 2011

COLUMN by LEE DYE

Researchers at the University of Montana found college students said they were frequently "hooking up," though they couldn't agree what the phrase meant.

SPECIAL TO ABCNEWS

Hookups have replaced casual sex and even dating on many college campuses over the years, but as is so often the case when sex is discussed, it's not altogether clear what everybody is talking about when they say "hookup." One new study at a large university suggests that most...
Logistics: Technology

**Clickers:** eInstruction vs. ViaResponse
Logistics: Technology

Canvas

Courses & Groups ➜ Assignments ➜ Grades ➜ Calendar

SP14: BIOL-21 Sec 01 - Human Biology

Course Modules

Course intro
- Bio 21 S14 Accessible Syllabus.pdf
- Bio21 Effective Learning Tips.pdf
- How to Sign Up for Lab Orientation Tutorial Video

Humans and The Global Environment Writing Assignment/Research Method

Writing Assignment Instructions and Worksheets
- Bio 21 Writing Assignment Sp14 v.3 updated Feb 26
- Bio 21 Stage 1 Research Methods Activity - Submit to Turnitin.com
- Bio 21 Stage 4 Grading Rubric.pdf

Research Methods Lecture (Poffenroth)
- Research Tutorial Videos
- Research Methods Lecture Slides.cpt
Logistics: Screen Capture Tutorials
Facility Website: Open Access

Poffenroth, Mary H.
Lecturer AY-A, Biological Sciences

E-mail
mary.poffenroth@sjsu.edu
Additional Contact Information

Phone Number(s)
(408) 924-4831

Bio: During her six years of teaching at SJSU, she has made innovation in science education a priority. Partnering with Wiley & Sons, she created original visual media and became a contributing author to the Visualizing Human Biology textbook and the Wiley Wonder Series (2010-2012). Mary specializes in large lecture formats (125 to 400 students), leads a team of 14 instructional student assistants, and is course coordinator for two general education courses. Leveraging her enormous class population, Mary created an outdoor, environmental student volunteer program. To date, over 2,000 students have volunteered over 8,000 work hours to local, environmental non-profit organizations. In 2012, she was awarded a DRC Outstanding Faculty Award and an IES-eCampus Grant. Her newest endeavor, Global Citizenship, is an integrative, team taught GE course that will help expand the horizons of interdisciplinary courses at SJSU. In 2013, she became one of 15 faculty members to receive a Salzburg Global Fellowship and will be joining the Salzburg Global Seminar in Austria over summer session.

Courses
- Volunteer Activities Page
- Biology 10 - The Living World
- Biology 21 - Human Biology
- Ecology and Social Change
- Integrative Science
Feedback

- Autoscored Lab Quizzes (Canvas)
- Detailed Rubrics
- Multi-Staged Writing Assignment

---

Spring 2014 Biology 21 (Poffenroth) Humans and The Global Environment Writing Project
All deadlines are firm – No late papers will be accepted (150 Total Points)

Overview/Due Dates (All are due by 11:59pm PST)
Stage 1: Research Methods, Topic Choice, and Paper Outline Activity (20 points). Due Feb 10. No Late Assignments
Stage 2: Submit your rough draft to ETS Criterion (5 points – Credit/No Credit). Due March 7. No late assignments.
Stage 3: Blind Peer Review via PeerMark (20 points: must submit AND review the papers of TWO students in our class in order to receive credit). Upload your draft by: March 12. PeerMark papers will be available on: March 13. PeerMark papers must be reviewed by: March 18. – No late assignments.
Stage 4: Submit complete FINAL DRAFT to turnitin.com for faculty grading (100 points). Due April 2.
Stage 5: Peer Analysis and Reflection, In-Class Assignment (5 points). May 12. (Papers will be available for you to review no later than May 10 at 8:00 am. Please review your comments/grade before May 12).
Logistics: Technology

ETS Criterion

Sign In to Your Criterion® Account

The Criterion® Online Writing Evaluation service from ETS is a web-based instructional writing tool that helps students, plan, write and revise their essays guided by instant diagnostic feedback and a Criterion score. Learn more.

- Students: Have more opportunities to practice writing at their own pace, get immediate feedback and revise essays based on the feedback.
- Teachers: Can decrease their workload and free up time to concentrate on the content of students' work and teach higher level writing skills.
- Administrators: Can make data driven decisions and easily monitor writing performance across and classroom writing performance.

Returning User

User name:  
REQUIRED  
Password:  
REQUIRED

Sign In  
Forgot User Name  
Forgot Password

New User

- You will need an access code from your Administrator or Instructor to create an account.
- If you used Criterion with a previous institution or class, please sign in with that user name and password. There is no need to create a new account.

Create Account
A Natural Setting
A History of Exploration and Settlement in Yosemite Valley

Yosemite National Park is a United States National Park spanning eastern portions of Tuolumne, Mariposa and Madera counties in east central California, United States. Although not the first designated national park, Yosemite was central to the development of the national park idea since its first discovery by non-indigenous people in mid-nineteenth century, Yosemite Valley has held a special, even religious, hold on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature.

While Yosemite holds a special grip on the western mind,
A Natural Setting
A History of Exploration and Settlement in Yosemite Valley

Yosemite National Park is a United States National Park spanning eastern portions of Tuolomne, Mariposa and Madera counties in east central California, United States. Although not the first designated national park, Yosemite was central to the development of the national park idea since its first discovery by non-indigenous people in mid-nineteenth century.

Yosemite Valley has held a special, even religious, hold on the American conscience because its beauty makes it an incomparable valley and one of the grandest of all special temples of Nature.

While Yosemite holds a special grip on the western mind,
Logistics: Room Management

• It is essential to have 1 – 3 ISAs in the room during regular lectures
• Laptops only allowed in first two rows
• Absolutely no cell phones
Logistics: Room Management

For exams: Between 5 – 7 ISAs

• If the room allows it: Collect exams, check IDs outside of testing room
My Personal Big Successes: Large Lectures

• Exposing over 9,000 students to environmental conservation and health/wellness issues that directly impact their lives with specific actions they can personally take now

• Contributing 10,000 work hours to conserving our local environment

• In some, inspiring a paradigm shift
  For the future health of their body & their planet
Questions & Audience Contributions

Thank You!