

## **The Effects of Adversity Examining the Science of Risk and Resilience**

**Spring 2019  
Monday and Wednesdays  
3:30-4:45 PM  
University of Vermont  
ROWELL 118**

*Instructor:*

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Office Hours: Monday morning  
by appointment

***Course Description:***

We will survey the science of adversity, risk, and resilience with a goal toward understanding the many areas of health and wellbeing affected by adversity. We will examine the underlying neuroscience and genomics of risk and resilience and how they are affected by adverse environments and how they are supported by wellness initiatives. To this end, we will begin the semester discussing the response of the body to stress and the underlying neuroscience and genomics of risk. We will then explore specific aspects of risk including poverty, adverse family environments, and food insecurity. After break, we will explore resilience – the flip side of risk – and the neuroscience and genomics of how it is bolstered with music, art, exercise/sports, and relationships. The course has an experiential design—we will often be listening to stories of risk and resilience to highlight the messages presented in the readings and brief lectures. We will explore our own resiliency factors and work on bolstering them, and we will discuss the implications in our lives, the lives of those around us, and society.

*Course Goals:*

1. Gain fluency with the foundational concepts and vocabulary of adversity, risk, and resilience.
2. Develop facility in analyzing and interpreting articles from the scientific literature on adversity and its correlates as well as facility interpreting the media portrayal of risk and resilience.
3. Consider the challenges of operationalizing the principles of resilience to reduce the effects of adversity into everyday living at the individual, system, and population levels.

*Course Objectives: (the numbers correspond with the Goals above)*

**1.a./2.a:** Detail what constitutes adversity in different settings. Outline the outcomes often measured in the study of adversity, why they are chosen, what differential information they offer, and which are important to you.

**1.b./2.b:** Use knowledge gained and synthesized from research and observation to write cogently about concepts in adversity, referencing the evidence base, labeling phenomena with core terms, and integrating concepts from the literature with one's own ideas.

**1.e./2.c:** Evaluate the evidence for the validity and impact of key concepts in the field of adversity, such as risk, resilience, post traumatic stress, abuse, neglect, adverse childhood experiences, optimism, etc.

**2.d:** Depict the major components of a research article and its relevance, e.g., study format, randomization, placebo/controls, biases, power, generalizability, replicability, diversity and validity of measures, relevance of outcomes studied, correlation vs. causation.

**2.e:** Analyze commentaries in the media reflecting on adversity with regard to their accuracy, reliability, and biases.

**2.f/3.a:** Use your understanding of adversity and resilience to create cases of individuals with resilience and to interpret the key concepts that help them demonstrate their resilience.

**3.b:** Apply a growing knowledge of adversity and resilience to proposing creative, evidence-based, impactful solutions to local and global dilemmas.

***Policies:***

- How to contact us: Use your UVM e-mail account so we can reply (if needed) with confidential information about your work in the class. In most cases, you will get a reply within one *business day*.
- How we contact you: Most information will be posted on Blackboard. If we need to contact you individually, we will use your UVM e-mail address. Students are expected to manage their own e-mail accounts so that they can receive messages related to the course.
- Web-based resources: <https://bb.uvm.edu/> This is your gateway to the resources for the course, including readings, videos, and other material. Most of your assignments will be posted and submitted here. You are expected to check it regularly.

***Classroom Environment Expectations:***

- Students are expected to attend every class, arriving promptly and remaining alert and involved until dismissed by the instructor.



- Faculty and students will promote academic discourse and the free exchange of ideas by listening with civil attention to all individuals.
- **Laptop computers and other web-enabled devices:** Cell phones cannot be used during class; laptops are not permitted except for situations agreed upon with the instructor. We want you to be engaged and participating. You may take notes on paper but all slides presented will be subsequently posted online for your review.
- Absences: As above, attendance is **mandatory**. You are allowed to miss two classes with no point losses as long as you notify the professor *in advance*. No absences will be excused if we are notified after the missed class. After the second absence you will lose your individual quiz points for each subsequent absence. (*Unless you have a scheduled varsity or club athletic event, religious holiday, illness, or family crisis that is covered by UVM policy*).

#### **Required Texts:**

- All required readings will be posted on Blackboard. Optional films listed can be acquired on your own or through a library.

#### **Grading:**

- Daily Quizzes/Participation: (Total 20% of final grade)
  - A short closed-book quiz will be administered at the start of each class. It will cover the required reading(s) assigned for that session. Participating in this quiz it in will result in *Daily Quiz* points (graded for completeness only). This will also serve as attendance and completion of this *Daily Quiz* will count for a total of 20% of your final grade, so it is important to be in class and participating. If there is no reading for the session (eg. Student Project presentations) the *Daily Quiz* will be a review question from previous material or a general survey question. These quizzes will most often be done using iClicker.

**NB:** These *Daily Quizzes* are your participation grade for the course. If you do not do the individual quiz, you cannot earn these points. If you are not in class on time then you will miss the *Daily Quiz* point for that day. No make-ups will be offered and there is no way to keep track of who and who does not have their iClicker that day. So if you are going to miss a class please notify us in advance. Only two excused absences will be allowed for the *Daily Quizzes*. We reserve the right to take attendance at any time and this may be reflected in your *Daily Quiz* grade.

- Weekly Exercises: (Total 20% of final grade)
  - Starting Jan 23rd, on Wednesday evening by 11 PM, we will post a quiz on Blackboard which can be completed anytime between Thursday and Sunday evening at 11pm. These *Weekly Quizzes* are designed to structure your study of the course material and to thereby enhance your understanding and



retention. Any given quiz is optional, but your best **eight** quiz grades will be averaged and will count toward 20% of your final grade. You are strongly advised to take ALL of the quizzes. Students in the past have regretted skipping quizzes early in the semester, thinking that they would make them up later. Taking the weekly quizzes is a good way to consolidate the material, helps you study for the final throughout the course, and gives me an ongoing picture of your performance in the course. This is important to allow me to assess your understanding of the material and to adjust as necessary.

- Case Studies (Total 10% of final grade)
  - Lecture material will be enhanced with case studies of stories of adversity and resilience. For the beginning of the course, these will be written by Dr. Althoff to enhance discussion. By 11 PM on February XX, 2019, each student will be asked to turn into Blackboard a case study of their own which can be used as examples in the course going forward. These case studies can be examples from literature, politics, popular culture, or your own personal life. The idea of these case studies is to demonstrate the effects of adversity on development and either the negative consequences of that adversity, the resilience of the individual in the face of adversity, or both.

Your case study should be *no less than 2 paragraphs and no more than 1.5 pages*. These will be entered on Blackboard.

The assignment is due by February 20th at 11:00PM on Blackboard; no late submissions will be accepted.

The case study will be graded out of 9 points. The cases will be graded based on effort, thought, and connection to or question about the course material. The scoring rubric will be posted on Blackboard and will be discussed in class but will consist of 3 points for each of effort, thought, and connection to course material.

- Student Presentation: (Total 30% of final grade)
  - At the end of the course, teams of 2-3 students will be expected to present on a topic related to adversity, risk, and resilience. These will be 10-15 minute presentations. Powerpoint or use of other visual media is not required, but appropriate use of audiovisual material will be considered positively in the grade. Grading for the presentation will be based on 1) relevance of the topic; 2) quality of the presentation; 3) appropriate use of audiovisual materials; 4) response to questions. All students and faculty will grade the presentations of other students on a scale of 0-20. Students within each team will also rate their fellow students on a scale of 0-20, which will include 1) contributions; 2) problem solving; 3) attitude; and 4) focus on the task. Student evaluations will be worth 2/3 (1/3 within team and 1/3 outside of team) and faculty evaluation worth 1/3 of this grade.
  - Scoring rubrics will be placed on Blackboard and will be discussed in class.
- Final Exam: (Total 20% of final grade)



- At the end of the course you will have a cumulative exam. The exam will consist of multiple choice questions and short answer questions. **At least 50% of the multiple choice questions will be taken from the Weekly quizzes**, again emphasizing the importance of taking the *Weekly quizzes*. This final will be taken individually on laptops.
- Grades
  - A+ > 99%
  - A = 92 to 98.9%
  - A- = 90 to 91.9%
  - B+ = 87 to 89.9%
  - B = 82 to 86.9%
  - B- = 80 to 81.9%
  - C+ = 77 to 79.9%
  - C = 72 to 76.9%
  - C- = 70 to 71.9%
  - D+ = 67 to 69.9%
  - D = 62 to 66.9%
  - D- = 60 to 61.9%
  - F < 60%

**\*\*For further policy information, see the end of this Syllabus.**

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N.B. The readings in the week-by-week schedule listed below are posted on the course site on Blackboard. You are expected to have completed the *required* readings *prior* to the class date for which they are assigned. The optional readings are also on the course site should you be interested in further material on a topic. Links are provided for the video clips. Movies are always optional and can be found through various services.

### **Section 1: Introductory**

**January 14<sup>th</sup>**: Introduction I – Class Introduction. Orientation to the syllabus. Explanation of projects and quizzes.

*Required Materials:* None

*Optional Materials:* None

**January 16<sup>th</sup>**: Introduction II: Defining and measuring adversity and related concepts.

*Required Materials:*

- The Adverse Childhood Experiences Study – The Largest Most Important Public Health Study You Never Heard of Began in an Obesity Clinic (<https://acestoohigh.com/2012/10/03/the-adverse-childhood-experiences-study-the-largest-most-important-public-health-study-you-never-heard-of-began-in-an-obesity-clinic/>)



- Take the ACE quiz (<http://www.npr.org/sections/health-shots/2015/03/02/387007941/take-the-ace-quiz-and-learn-what-it-does-and-doesnt-mean>)

*Optional Materials:*

- Nadine Burke Harris on ACEs (An excerpt of this will be shown in class) ([https://www.ted.com/talks/nadine\\_burke\\_harris\\_how\\_childhood\\_trauma\\_affects\\_health\\_across\\_a\\_lifetime](https://www.ted.com/talks/nadine_burke_harris_how_childhood_trauma_affects_health_across_a_lifetime))

**January 21:** MLK Jr. Holiday

**January 23<sup>rd</sup>:** Psychological theories of adversity and overcoming it

*Weekly Quiz #1 will be open today on Blackboard and due on Sunday night, January 27<sup>th</sup> by 11PM*

*Required Materials:*

- Updegraff, J.A., & Taylor, S.E. (2000). From vulnerability to growth: Positive and negative effects of stressful life events. In J. Harvey & E. Miller (Eds.) *Loss and Trauma: General and Close Relationship Perspectives* (pp. 3-28). Philadelphia, PA: Brunner-Routledge.

*Optional Materials:*

- Dan Gilbert: The surprising science of happiness (An excerpt of this will be shown in class) ([https://www.ted.com/talks/dan\\_gilbert\\_asks\\_why\\_are\\_we\\_happy#t-184340](https://www.ted.com/talks/dan_gilbert_asks_why_are_we_happy#t-184340))

**January 27<sup>th</sup>: 11PM. Weekly Quiz #1 Due**

**January 28<sup>th</sup>:** A review of nervous system development and stress responsiveness

*Required Materials:*

- Smith S.M. & Vale W.W. (2006). The role of the hypothalamic-pituitary-adrenal axis in neuroendocrine responses to stress. *Dialogues Clin Neurosci* 8(4): 383–395.

*Optional Materials:*

- Chapter 2: The Anatomy and Physiology of the Human Stress Response (2013) in G.S. Everly and J.M. Lating, *A Clinical Guide to the Treatment of the Human Stress Response*, DOI 10.1007/978-1-4614-5538-7\_2, Springer Science+Business Media New York
- The Physiology of Stress: Cortisol and the Hypothalamic-Pituitary-Adrenal Axis (<http://dujs.dartmouth.edu/2011/02/the-physiology-of-stress-cortisol-and-the-hypothalamic-pituitary-adrenal-axis/#.WHKh9FMrLRY>)
- Stress and the Brain: Jaime Tartar at TEDxNSU (<https://www.youtube.com/watch?v=XQeDYBS63IY>)

**January 30<sup>th</sup>:** Introduction to genomics and epigenomics

*Weekly Quiz #2 will be open today on Blackboard and due on Sunday night, February 3<sup>rd</sup> by 11PM*

*Required Materials:*

- NIH "The New Genetics. Chapter 1: How Genes Work. NIH Publication No. 10-662. Revised April 2010.  
(<https://publications.nigms.nih.gov/thenewgenetics/thenewgenetics.pdf>)

*Optional Materials:*

- Epigenetics and the influence of our genes: Courtney Griffins at TEDxOU  
(<https://www.youtube.com/watch?v=JTBg6hqeuTg>)

*February 3<sup>rd</sup>: 11PM. Weekly Quiz #2 Due*

## **Section 2: Adversity and Development**

**February 4<sup>th</sup>:** The role of chronic stress in the developing brain

*Teams will be assigned during class today and time will be given for brief meetings as a team.*

*Required Materials:*

- National Scientific Council on the Developing Child. (2005/2014). Excessive Stress Disrupts the Architecture of the Developing Brain: Working Paper 3. Updated Edition. ([http://developingchild.harvard.edu/wp-content/uploads/2005/05/Stress\\_Disrupts\\_Architecture\\_Developing\\_Brain-1.pdf](http://developingchild.harvard.edu/wp-content/uploads/2005/05/Stress_Disrupts_Architecture_Developing_Brain-1.pdf))

*Optional Materials:*

- Bucci M., Marques S.S., Oh D., & Harris N.B. Toxic Stress in Children and Adolescents. *Advances in Pediatrics*. 2016 Aug;63(1):403-28.

**February 6<sup>th</sup>:** Intergenerational transmission of adversity

*Weekly Quiz #3 will be open today on Blackboard and due on Sunday night, February 10<sup>th</sup> by 11PM*

*Required Materials:*

- Bowers M.E. & Yehuda R. Intergenerational transmission of stress in humans. *Neuropsychopharmacology Reviews*. 2016. 41, 232-244.

*Optional Materials:*

- Epigenetics and the influence of our genes. Courtney Griffins. TEDxOU  
(<https://www.youtube.com/watch?v=JTBg6hqeuTg>)

**February 10<sup>th</sup>: 11PM. Weekly Quiz #3 Due**

**February 11<sup>th</sup>:** The effects of adversity on the genome/epigenome

*Required Materials:*

- Gröger N, Matas E, Gos T, Lesse A, Poeggel G, Braun K, Bock J. The transgenerational transmission of childhood adversity: behavioral, cellular, and epigenetic correlates. *J Neural Transm (Vienna)*. 2016 Sep;123(9):1037-52.

**February 13<sup>th</sup>:** Family factors that promote resilience

*Weekly Quiz #4 will be open today on Blackboard and due on Sunday night, February 18<sup>th</sup> by 11PM*

*Required Materials:*

- Saltzman WR, Lester P, Beardslee WR, Layne CM, Woodward K, Nash WP. Mechanisms of risk and resilience in military families: theoretical and empirical basis of a family-focused resilience enhancement program. *Clin Child Fam Psychol Rev*. 2011 Sep;14(3):213-30.

*Optional Materials:*

Movie: The Pursuit of Happyness

**February 17<sup>th</sup>: 11PM. Weekly Quiz #4 Due**

**February 18<sup>th</sup>: NO CLASS, PRESIDENT'S DAY**

### **Section 3: Poverty and Related Topics**

**February 20<sup>th</sup>:** Poverty lab – Kerry O'Loughlin

*Case study uploaded to Blackboard by 11 pm tonight.*

*Weekly Quiz #5 will be open today on Blackboard and due on Sunday night, February 24<sup>th</sup> by 11PM*

- No readings

**February 24<sup>th</sup>: 11PM. Weekly Quiz #5 Due**

**February 25<sup>th</sup>:** The politics of poverty

*Required Materials:*

- Brady D., Blome A, Kelider H (2016). How Politics and Institutions Shape Poverty and Inequality. in The Oxford Handbook of the Social Science of Poverty.

*Optional Materials:*

- Welfare and the Politics of Poverty, NY Times.  
(<https://www.nytimes.com/video/us/100000004377970/welfare-and-the-politics-of-poverty.html>)
- The political war over poverty. Leigh Ann Caldwell. CNN. Jan 8, 2014.  
(<http://www.cnn.com/2014/01/01/politics/politics-of-poverty/>)
- The good news on poverty (Yes, there's good news). Bono. TED2013

**February 27<sup>th</sup>:** The effects of poverty on health – Dr. Bill Copeland

*Weekly Quiz #6 will be open today on Blackboard and due on Sunday night, March 3<sup>rd</sup> by 11PM*

*Required Materials:*

- Pappas G, Queen S, Hadden W, Fisher G. The increasing disparity in mortality between socioeconomic groups in the United States, 1960 and 1986. N Engl J Med. 1993 Jul 8;329(2):103-9.

*Optional Materials:*

- Sharma S, Ford-Jones E. Child poverty. Ways forward for the paediatrician: A comprehensive overview of poverty reduction strategies requiring paediatric support. Paediatr Child Health. 2015 May;20(4):203-7.
- How Income Inequality Harms Societies. Richard Wilkinson. Ted International.

**March 3<sup>rd</sup>: 11PM. Weekly Quiz #6 Due**

**March 4<sup>th</sup>:** The effects of adversity on parenting and vice versa

*Required Materials:*

- Hagan M.J., Roubinov D.S., Adler N.E., Boyce W.T., & Bush N.R. Socioeconomic Adversity, Negativity in the Parent Child-Relationship, and Physiological Reactivity: An Examination of Pathways and Interactive Processes Affecting Young Children's Physical Health. Psychosom Med. 2016. 78(9):998-1007.

*Optional Materials:*

- Parenting at a Challenging Time: A Dozen Lessons Learned  
(<http://www.mghpact.org/for-parents/a-dozen-lessons-learned>)

**March 6<sup>th</sup>:** Food security and insecurity and health

*Weekly Quiz #7 will be open today on Blackboard and due on Sunday night, March 18<sup>th</sup> by 11PM*

*Required Materials:*

- Althoff RR, Ametti M, Bertmann F. The role of food insecurity in developmental psychopathology. *Prev Med.* 2016 Nov;92:106-109.
- Casey PH, Simpson PM, Gossett JM, Bogle ML, Champagne CM, Connell C, Harsha D, McCabe-Sellers B, Robbins JM, Stuff JE, Weber J. The association of child and household food insecurity with childhood overweight status. *Pediatrics.* 2006 Nov;118(5):e1406-13.

*Optional Materials:*

- Obesity + hunger = 1 global food issue. Ellen Gustafson. TEDxEast
- Movie: A Place at the Table
- The surprisingly dramatic role of nutrition in mental health. Julia Rucklidge. TEDxChristchurch

**March 11<sup>th</sup> and 13<sup>th</sup> SPRING BREAK**

*March 18<sup>th</sup>: 11PM. Weekly Quiz #7 Due*

**Section 4: Effects of Adversity in Adulthood**

**March 18<sup>th</sup>:** Effects of ACEs on cardiac and metabolic health

*Required Materials:*

- Pretty C, O'Leary DD, Cairney J, Wade TJ. Adverse childhood experiences and the cardiovascular health of children: a cross-sectional study. *BMC Pediatr.* 2013 Dec 17;13:208

*Optional Materials:*

- How childhood trauma affects health across a lifetime. Nadine Burke Harris: TEDMed2014

**March 20<sup>th</sup>:** *Team Presentation Work*

*Weekly Quiz #8 will be open today on Blackboard and due on Sunday night, March 24<sup>th</sup> by 11PM*

This session is for work as teams on presentations to complete proposals for the following week.

*March 24<sup>th</sup>: 11PM. Weekly Quiz #8 Due*

**March 25<sup>th</sup>**: Effects of stress and adversity on the immune system

*Proposals for Student Team Presentations due in class today.*

*Required Materials:*

- Morey JN, Boggero IA, Scott AB, Segerstrom SC. Current Directions in Stress and Human Immune Function. *Curr Opin Psychol.* 2015 Oct 1;5:13-17.

*Optional Materials:*

- Coelho R, Viola TW, Walss-Bass C, Brietzke E, Grassi-Oliveira R. Childhood maltreatment and inflammatory markers: a systematic review. *Acta Psychiatr Scand.* 2014 Mar;129(3):180-92.
- What makes us get sick? Look upstream. Rishi Manchanda. TEDSalon NY2014

## **Section 5: Resilience**

**March 27<sup>th</sup>**: The neuroscience and genomics of resilience

*Weekly Quiz #9 will be open today on Blackboard and due on Sunday night, March 31<sup>st</sup> by 11PM*

*Required Materials:*

- Russo SJ, Murrough JW, Han MH, Charney DS, Nestler EJ. Neurobiology of resilience. *Nat Neurosci.* 2012 Nov;15(11):1475-84.

*Optional Materials:*

- Bergland C. Deconstructing the Neurobiology of Resilience.
- The Science of Compassion: Origins, Measures, and Interventions - Sarina Rodrigues Saturn, Ph.D. (<https://www.youtube.com/watch?v=a1rbMavSBIs>)

***March 31<sup>st</sup>: 11PM. Weekly Quiz #9 Due***

**April 1<sup>st</sup>**: NO CLASS

*Required Materials:*

- Bowes L, Jaffee SR. Biology, genes, and resilience: toward a multidisciplinary approach. *Trauma Violence Abuse.* 2013 Jul;14(3):195-208

*Optional Materials:*

- How to make stress your friend. Kelly McGonigal. TED.



- Luthar SS, Brown PJ. Maximizing resilience through diverse levels of inquiry: Prevailing paradigms, possibilities, and priorities for the future. *Dev Psychopathol.* 2007 Summer;19(3):931-55.

**April 3<sup>rd</sup>**: Supporting resilience through music

*Weekly Quiz #10 will be open today on Blackboard and due on Sunday night, April 7<sup>th</sup> by 11PM*

*Required Materials:*

- Kraus N, Strait DL. Emergence of biological markers of musicianship with school-based music instruction. *Ann N Y Acad Sci.* 2015 Mar;1337:163-9.

*Optional Materials:*

- Bradt J, Dileo C, Magill L, Teague A. Music interventions for improving psychological and physical outcomes in cancer patients. *Cochrane Database Syst Rev.* 2016 Aug 15;(8):CD006911.
- How Music Saved Venezuela's Children. *BBC Imagine.* 11-18-08. (<https://www.youtube.com/watch?v=43tqQhOTCgQ>)

***April 7<sup>th</sup>: 11PM. Weekly Quiz #10 Due***

**April 8<sup>th</sup>**: Supporting resilience through art and drama

*Required Materials:*

Coholic, D.A. Exploring the Feasibility and Benefits of Arts-Based Mindfulness-Based Practices with Young People in Need: Aiming to Improve Aspects of Self-Awareness and Resilience. *Child Youth Care Forum* (2011) 40: 303-317.

*Optional Materials:*

- Fletcher et al. Youth Creating Disaster Recovery and Resilience: A Multi-Site Arts-Based Youth Engagement Research Project. *Children, Youth and Environments*, vol. 26, no. 1, 2016, pp. 148-163.
- Macpherson, H., Hart, A., Heaver, B. Building resilience through group visual arts activities: Findings from a scoping study with young people who experience mental health complexities and/or learning difficulties. *Journal of Social Work.* 2016. 16(5): 541-560
- Empowering kids in Camden through dance (<https://www.youtube.com/watch?v=xptB32psR7Y>)
- Movie: Mr. Holland's Opus

**April 10<sup>th</sup>**: Supporting resilience through sports

*Weekly Quiz #11 will be open today on Blackboard and due on Sunday night, April 14<sup>th</sup> by 11PM*

*Required Materials:*

- Eime RM, Young JA, Harvey JT, Charity MJ, Payne WR. A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport. *Int J Behav Nutr Phys Act.* 2013 Aug 15;10:98.

*Optional Materials:*

- Denny KG, Steiner H. External and internal factors influencing happiness in elite collegiate athletes. *Child Psychiatry Hum Dev.* 2009 Mar;40(1):55-72.
- White R.L. & Bennie A. Resilience in youth sport: A qualitative investigation of gymnastic coach and athlete perceptions. *International Journal of Sports Science & Coaching* Volume 10 · Number 2+3 · 2015
- The real importance of sports. Sean Adams. TEDxACU
- Movie: Rocky

**April 14<sup>th</sup>: 11PM. Weekly Quiz #11 Due**

**April 15<sup>th</sup>: Supporting resilience through intimate relationships**

*Required Materials:*

- Feeney BC, Collins NL. A new look at social support: a theoretical perspective on thriving through relationships. *Pers Soc Psychol Rev.* 2015 May;19(2):113-47.

*Optional Materials:*

- Movie: Life is Beautiful

**April 17<sup>th</sup>: Making a difference – Suzanne**

*Weekly Quiz #12 will be open today on Blackboard and due on Sunday night, April 21<sup>st</sup> by 11PM*

*Required Materials:*

- 10 Solutions to Fight Economic Inequality. Talk Poverty. 6-10-15.

*Optional Materials:*

- How to change the world: John Paul Flintoff at TEDxAthens 2012

**April 21<sup>st</sup>: 11PM. Weekly Quiz #12 Due**

## **Section 6: Student Projects**

**April 22<sup>nd</sup>**: Student Projects #1 (Groups 1-3)

**April 24<sup>th</sup>**: Student Projects #2 (Groups 4-6)

**April 29<sup>th</sup>**: Finals Review

**May 1<sup>st</sup>**: FINAL EXAM During Class

**May 6<sup>th</sup> (16:30-19:15)**: SCHEDULED FINAL EXAM TIME, NOT USED.

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### ***Student Presentations:***

Teams will be assigned on February 4<sup>th</sup>.

Each team of students will be assigned a date to do a short (~10-15 minute) presentation on a scientific study of your choosing related to the course material. The topic must be chosen in advance and approved by the professor. The project proposal submission form is posted on Blackboard. There will be time to work on projects as teams in class. The proposals for final student presentations are due in class on March 25<sup>th</sup>. If you are uncertain about the quality of the topic, write to the professor well ahead of time to get approval or else you will not earn full credit.

Your charge with the presentation is to creatively convey the science of the topic and how it applies to everyday life. Creative formats including activities, quizzes, poetry, theater, dance, music, videos, and other art forms are welcome.

### **Grading Rubric for Student Presentations:**

- 4 points for group participation
- 4 points for relevance of the topic: reviewing the science of the topic and its relation to the course.
- 4 points for quality of the presentation, including clarity
- 4 points for appropriate use of audiovisual materials, including creativity and originality in delivering the presentation
- 4 points for responses to questions

### **Grading Rubric for Team Participation in Presentations:**

- 4 points for contributions
- 4 points for problem solving
- 4 points for attitude
- 4 points for focus on the task
- 4 points for working with others

All students and faculty will grade the presentations of other students on a scale of 0-20 based on this rubric. Student evaluations will be worth 2/3 (1/3 within the group and 1/3 outside of the group) and faculty evaluation worth 1/3 of this grade. Keep in mind that, based on this rubric, the 1-2 people assigned to your group will have a great deal of influence on your individual grade for this presentation. It is to your advantage to work well with the team.

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### ***More Policies:***

- **Student Learning Accommodations:** In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact ACCESS, the office of Disability Services on campus. ACCESS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations via an accommodation letter to faculty with approved accommodations as early as possible each semester. All students are strongly encouraged to meet with their faculty to discuss the accommodations they plan to use in each course.

Contact ACCESS: A170 Living/Learning Center; 802-656-7753; [access@uvm.edu](mailto:access@uvm.edu); [www.uvm.edu/access](http://www.uvm.edu/access)

- UVM's policy on disability certification and student support: [www.uvm.edu/~uvmppg/ppg/student/disability.pdf](http://www.uvm.edu/~uvmppg/ppg/student/disability.pdf)
- **Religious Holidays:** Students have the right to practice the religion of their choice. If you need to miss class to observe a religious holiday, please submit the dates of your absence to me in writing by the end of the second full week of classes. You will be permitted to make up work within a mutually agreed-upon time.
- **Academic Integrity:** The policy addresses plagiarism, fabrication, collusion, and cheating. <http://www.uvm.edu/~uvmppg/ppg/student/acadintegrity.pdf>
- **Grade Appeals:** If you would like to contest a grade, please follow the procedures outlined in this policy: <http://www.uvm.edu/~uvmppg/ppg/student/gradeappeals.pdf>
- **Grading:** For information on grading and GPA calculation, go to [www.uvm.edu/academics/catalogue](http://www.uvm.edu/academics/catalogue) and click on Policies for an A-Z listing.
- **Code of Student Rights and Responsibilities:** [www.uvm.edu/~uvmppg/ppg/student/studentcode.pdf](http://www.uvm.edu/~uvmppg/ppg/student/studentcode.pdf)



- **FERPA Rights Disclosure:** The purpose of this policy is to communicate the rights of students regarding access to, and privacy of their student educational records as provided for in the Family Educational Rights and Privacy Act (FERPA) of 1974. <http://www.uvm.edu/~uvmppg/ppg/student/ferpa.pdf>
- **Promoting Health & Safety:** The University of Vermont's number one priority is to support a healthy and safe community:
- **Center for Health and Wellbeing** <http://www.uvm.edu/~chwb/>
- **Counseling & Psychiatry Services (CAPS)** Phone: (802) 656-3340  
**C.A.R.E.** If you are concerned about a UVM community member or are concerned about a specific event, we encourage you to contact the Dean of Students Office (802-656-3380). If you would like to remain anonymous, you can report your concerns online by visiting the Dean of Students website at <http://www.uvm.edu/~dos/>
- **Final exam policy:** The University final exam policy outlines expectations during final exams and explains timing and process of examination period. <http://www.uvm.edu/academics/catalogue2013-14/?Page=allpolicies.php&SM=policymenu.html&policy=Exams>

**Statement on Alcohol and Cannabis in the Academic Environment**

As a faculty member, I want you to get the most you can out of this course. You play a crucial role in your education and in your readiness to learn and fully engage with the course material. It is important to note that alcohol and cannabis have no place in an academic environment. They can seriously impair your ability to learn and retain information not only in the moment you may be using, but up to 48 hours or more afterwards. In addition, alcohol and cannabis can:

- Cause issues with attention, memory and concentration
- Negatively impact the quality of how information is processed and ultimately stored
- Affect sleep patterns, which interferes with long-term memory formation

It is my expectation that you will do everything you can to optimize your learning and to participate fully in this course.

**IMPORTANT DEADLINES**

Sunday, 1/27, 11 pm	Weekly Quiz #1 due on Blackboard
Sunday, 2/3, 11 pm	Weekly Quiz #2 due on Blackboard
Sunday, 2/10, 11 pm	Weekly Quiz #3 due on Blackboard
Sunday, 2/17, 11 pm	Weekly Quiz #4 due on Blackboard
Wednesday, 2/20, 11 pm	Case study uploaded to Blackboard
Sunday, 2/24, 11 pm	Weekly Quiz #5 due on Blackboard



Sunday, 3/3, 11 pm	Weekly Quiz #6 due on Blackboard
Monday, 3/18, 11 pm	Weekly Quiz #7 due on Blackboard
Sunday, 3/24, 11 pm	Weekly Quiz #8 due on Blackboard
Monday, 3/25, in class	Student/Team presentation proposals due in class
Sunday, 3/31, 11 pm	Weekly Quiz #9 due on Blackboard
Sunday, 4/7, 11 pm	Weekly Quiz #10 due on Blackboard
Sunday, 4/14, 11 pm	Weekly Quiz #11 due on Blackboard
Sunday, 4/21, 11 pm	Weekly Quiz #12 due on Blackboard
Monday, 5/6, 4:30 pm	Final Exam, Rowell 118