**Chapman**

**University**

**University Honors Program Course** **(714) 744-7646** **Fax (714) 532-6048**

University Honors Program: HON

**Dinosaurs: In Science and Media**

Syllabus - Fall 2021 4:00 - 5:15 Doti Hall 105

When & Where

Course Description: *Prerequisite: acceptance to the University Honors Program, or consent of instructor. This course will address the topic of dinosaurs from the perspectives of science and media. The scientific perspective will include how dinosaur remains are found, studied, and interpreted while the media perspective will focus on how dinosaurs are depicted in media as well as how dinosaur science was integrated into the Jurassic Park franchise movies. Students will write an article and a short script. (Offered as needed.) 3 credits.*

**Instructor: Jack Horner, Professor, Presidential Fellow, Honors Program**

[jhorner@chapman.edu](mailto:jhorner@chapman.edu)

Office Hours: By appointment.

Honors Program Coordinator, Ashley Cosgrove (714) 744-7646 cosgrove@chapman.edu

**GE Natural Science Inquiry Learning Outcome:**

***Students engage in scientific investigation to explore the knowledge produced by scientific processes.***

Course Learning Objectives:

\* Apply the scientific method to analyze dinosaur discoveries as presented in scientific and popular media.

\* Learn the difference between scientific theory and popular opinion.

\* Evaluate the science interpreted by various scientific arguments based on physical evidence.

\* Learn how to write a scientific paper

**Honors Program Learning Outcomes**:

Upon completing a course in the University Honors Program students will have:

1. Obtained a starting point for integrative exploration of the development of cultures and intellectual achievements through a variety of disciplinary and interdisciplinary perspectives;
2. Sharpened their ability to critically analyze and synthesize a broad range of knowledge through the study of primary texts and through engagement in active learning with fellow students, faculty, and texts (broadly understood);
3. Understood how to apply more integrative and interdisciplinary forms of understanding in the advancement of knowledge and in addressing complex challenges shaping the world; Developed effective communication skills, specifically in the areas of written and oral exposition and analysis.

**Textbooks:**

Required:

Pim, K., Dinosaurs, 2019, The Grand Tour. The Experiment, LLC, New York, pp. 352.

Crichton, M., 1990, Jurassic Park, Ballentine Books, New York (2015).

Recommended:

Brusatte, Steve, 2018. The rise and fall of the dinosaurs. Harper Collins, New York

Crichton, M., 1995, The Lost World, Knopf, New York

**Grading: Points:**

Midterm Exam – 100

Final Exam – Script- 200

Active and appropriate participation (class attendance; focused and

meaningful involvement in class activities) 100

**TOTAL POINTS 500**

• **All students are encouraged to attend every class meeting. Poor attendance will affect your grade. Absences exceeding 20% normally result in the student receiving a grade of “F” or “NP” unless he/she withdraws officially (2 “tardies” constitute an absence). Active and appropriate participation (class attendance; focused and meaningful involvement in class activities. Each student is required to take an active part in class discussions.**

• **All cell phones must be off and put out of reach during class time.** **Side chatting or cell phone use in class is unacceptable**, and offenders will be asked to leave and marked absent.

• **There will be no make-up exams or quizzes! Documentation is required for all class conflicts such as athletic team travel, deaths in the family, hospitalization, etc.**

• **Assignments must be submitted in on time through Blackboard (click on “Assignments” and follow the instructions, make sure you click on “submit” as your last step). Students will be penalized 20% for handing an assignment in late on the day it is due and another 40% for each day the assignment is late thereafter.**

**Before handing in assignments make sure they are proofed, edited, and typed neatly (double spaced in font 12)!**

• In addition to the readings and lectures listed in the course outline, students may be responsible for other assignments given in class. Also, some assignments, such as attending a film or guest speaker, may require a time commitment other than the scheduled class period. One such assignment will be **a mandatory day-long Sunday field trip to the Los Angeles County Museum of Natural History (TBA).**

**Please note that this course requires close attention, active participation, and heavy reading and writing assignments at times; also, all reading assignments may not be discussed in class. Please be aware that the course outline is just a guide. We may vary the contents and the time projections, depending on unexpected events, speakers, etc. and the needs of the class.**

**Chapman University’s Academic Integrity Policy***:*

Chapman University is a community of scholars that emphasizes the mutual responsibility of all members to seek knowledge honestly and in good faith.  Students are responsible for doing their own work and academic dishonesty of any kind will be subject to sanction by the instructor/administrator and referral to the university Academic Integrity Committee, which may impose additional sanctions including expulsion.  Please see the full description of Chapman University's policy on Academic Integrity at <https://www.chapman.edu/academics/academic-integrity/_files/academic-integrity-policy.pdf>

**Chapman University’s Students with Disabilities Policy**

“In compliance with ADA guidelines, students who have any condition, either permanent or temporary, that might affect their ability to perform in this class are encouraged to contact the Disability Services Office.  If you will need to utilize your approved accommodations in this class, please follow the proper notification procedure for informing your professor(s). This notification process must occur more than a week before any accommodation can be utilized. Please contact Disability Services at (714) 516–4520 or visit [www.chapman.edu/students/student-health-services/disability-services](http://www.chapman.edu/students/student-health-services/disability-services) if you have questions regarding this procedure or for information or to make an appointment to discuss and/or request potential accommodations based on documentation of your disability. Once formal approval of your need for an accommodation has been granted, you are encouraged to talk with your professor(s) about your accommodation options.  The granting of any accommodation will not be retroactive and cannot jeopardize the academic standards or integrity of the course.”

**Chapman University’s Equity and Diversity Policy**

Chapman University is committed to ensuring equality and valuing diversity. Students and professors are reminded to show respect at all times as outlined in [Chapman’s Harassment and Discrimination Policy](https://www.chapman.edu/faculty-staff/human-resources/_files/harassment-and-discrimination-policy.pdf). Any violations of this policy should be discussed with the professor, the [Dean of Students](https://www.chapman.edu/students/dean-of-students/index.aspx) and/or otherwise reported in accordance with this policy.

**Student Support at Chapman University**.  Over the course of the semester, you may experience a range of challenges that interfere with your learning, such as problems with friend, family, and or significant other relationships; substance use; concerns about personal adequacy; feeling overwhelmed; or feeling sad or anxious without knowing why.  These mental health concerns or stressful events may diminish your academic performance and/or reduce your ability to participate in daily activities.  You can learn more about the resources available through Chapman University’s Student Psychological Counseling Services here:

<https://www.chapman.edu/students/health-and-safety/psychological-counseling/>

Fostering a community of care that supports the success of students is essential to the values of Chapman University.  Occasionally, you may come across a student whose personal behavior concerns or worries you, either for the student’s well-being or yours.  In these instances, you are encouraged to contact the Chapman University Student Concern Intervention Team who can respond to these concerns and offer assistance:

<https://www.chapman.edu/students/health-and-safety/student-concern/index.aspx>.  While it is preferred that you include your contact information so this team can follow up with you, you can submit a report anonymously.  24-hour emergency help is also available through Public Safety at 714-997-6763.

**Topics to be covered (Syllabus) based on a two 75 minute class per week schedule.**

**Part 1 Dinosaurs in Science**

Aug. 30. Who are you and who am I? What is Science? Evolution? Cladistics & Phylogeny plus geology. With 15 minute Socratic discussion.

Sep. 1. How do we find dinosaur remains? Geology and excavation. PowerPoint lecture with visuals to illustrate how we use geology to find fossil remains, and how they are excavated. Additional data. With 15 minute Socratic discussion.

Sep. 8. Dinosaur biogeography, where they lived and where we find them. Also, the evidence for dinosaurs. With a 15 minute Socratic discussion.

Sep. 13. What dinosaurs ate, and how we go about determining their diet.. With 15 minute Socratic discussion.

Sep. 15. Dinosaur behavior I PowerPoint lecture with visuals to illustrate how scientists determine dinosaur social behaviors based on geology and skeletal features. With 15 minute Socratic discussion.

Sep. 20. Dinosaur behavior II PowerPoint lecture with visuals to illustrate how paleontologists determine behaviors such as locomotion and diet. With 15 minute Socratic discussion.

Sep. 22. Dinosaur accoutrements. Why some dinosaurs had elaborate bodies or skulls, and what they were used for. With 15 minute Socratic discussion.

Sep. 27. Dinosaur phylogenetics. The origin of dinosaurs. 30 minute PowerPoint lecture with specimens students can examine to understand skeletal characteristics.

Sep. 29. Sauropodomorpha. The long neck’s. With a 15 minute Socratic discussion.

Oct. 4. Theropod dinosaurs I Visuals to illustrate the various primitive theropod dinosaurs, and their unique characteristics. With a 15 minute Socratic discussion.

Oct. 6. Theropod dinosaurs II Lecture on the advanced theropod dinosaurs. With a discussion.

Oct. 11. Thyreophoran dinosaurs. PowerPoint lecture with visuals to illustrate the various armoered dinosaurs, and their unique characteristics. With a 15 minute Socratic discussion.

Oct. 13. Ornthischia: Marginocephalians. Horned dinosaurs. With a 15 minute Socratic discussion.

Oct. 18. Ornithischia: Ornithopoda: Iguanodonts and hadrosaurs. With discussion

Oct. 20. Dinosaur extinction. Video presentation: Death of the Dinosaurs: https://www.youtube.com/watch?v=u8WT5JePYso

Oct. 25. The Real Jurassic Park

Oct. 27. Mongolia

MIDTERM EXAM - A paper written as a magazine article for the public

**Part II. Dinosaurs in the Media**

Nov. 1. How Dinosaurs are perceived. Student led class discussion

Nov. 3. Jurassic Park, the book and the movie. Student led, class discussion of the movie.

Nov. 8. Special Guest

Nov. 10. Screenwriting Class (Student led)

Nov. 15. Dinosaur consumer Goods, student led discussion.

Nov. 17. Special Guest

Dec. 1 Jurassic World: Short lecture with discussion of the movie, the script and the making of:

https://www.youtube.com/watch?v=FXgiiY3dF1U

https://www.youtube.com/watch?v=gFRkvanD2ao

<https://www.youtube.com/watch?v=3-dKU6HQ0oI>

Dec. 6. Final Presentations

Dec. 8. Final Presentations

Nov. 9. OVER VIEW

Final Exam Time