The World is Complex

Political Science 87 SSB 353

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Class Meets: Monday 4:00 p.m. – 5:50 p.m. on September 27; October 11, 25; November 8, 22.

Office Hours: Monday, 2:00 - 3:00 p.m.

My Mission as a Teacher:

"To enable my students to learn joyfully, think clearly, read carefully, and write well."

Abstract

One strategy for understanding the world is to divide it into smaller and smaller parts. Complexity theory asks what can emerge when those parts interact. We will look at how complex things like culture, free will, cooperation, and political parties emerge from much simpler constituents.

Books

Required:

Emergence: The Connected Lives of Ants, Brains, Cities, and Software (2002) (\$10.88) Steven Johnson

Recommended:

Various examples of complexity theory in the news will be handed out and discussed as well.

Topics & Readings

Meeting 1 (Monday, September 27th) – Introduction Introduction: Here Comes Everybody (13 pages) Chapter 1 – The Myth of the Ant Queen (39 pages)

Meeting 2 (Monday, October 11th) – Chapter 2 – Street Level (27 pages) Chapter 3 – The Pattern Match (29 pages)

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    Meeting 3 (Monday, October 25<sup>th</sup>) –
        Chapter 4 – Listening to Feedback (33 pages)
    Meeting 4 (Monday, November 8<sup>th</sup>) –
        Chapter 5 – Control Artist (27 pages)
    Meeting 5 (Monday, November 22<sup>nd</sup>) –
        Chapter 6 – The Mind Reader (32 pages)
        Chapter 7 – See What Happens (8 pages)
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Final Paper Due (December 3rd)

Assignments & Grading

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20% -- Participation
80% -- Final Paper (3 pages)
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- D Regurgitation Like an infant, you are good at spitting it back out.
- C Basic Applying the facts and skills "as is."
- B Intermediate Applying the facts and skills to new problems or situations.
- A Advanced Asking counter-factual questions, modifying operative principles to illustrate command of the core concepts in challenging contexts.

Grade Changes and Extensions

All requests for grade changes must be made formally to me. Requests must be typed, double spaced, and include precise textual citations that support your contention. A review of any grade may result in either a higher or a lower grade. Extensions on assignments and make-up exams will only be granted in cases of documented illness or family medical emergencies. Please contact me as soon as possible if you need to request one.

Late Policy

Papers are due at the **beginning** of class. 2% bonus if an assignment is turned in more than 25 hours early. A 5% penalty applies for any papers turned in after the beginning of class, with a 5% additional penalty for each day an assignment is turned in late. No papers will be accepted electronically. A paper is not submitted until I have a physical copy of it.

Plagiarism

Fidelity to ones' own ideas and the ideas of others dictates that proper citation be made for any work or idea of another. If I believe that you have violated this principle, I will change from being your advocate to being your prosecutor and I will seek the strongest penalty consistent with university policy.