

Biology 495: Monster Biology
Syllabus, Spring 2002
T TR 1100-1215

Dr. Warrick

Week:	Lecture topic (<i>movie</i>)
Jan. 8, 10	A brief history of monsters: Personal to apocalyptic; Vampires, werewolves (<i>The Wolfman, 1941</i> ★★★★★)
Jan. 15, 17	Real Big Monsters: The evolution of gigantism; Dinosaurs (<i>Jurassic Park, 1993</i> ★★★★★)
Jan. 22, 24	Cursorial vertebrates: Scaling, Biomechanics of musculoskeletal systems (<i>Godzilla, 1954</i> ★★★★★; <i>Godzilla, 1998</i> ★; see also <i>Night of the Lepus</i> ★★★★★)
Jan. 29, 31	Cursorial invertebrates: Scaling, Biomechanics of walking, running, and adhesion (<i>Them! 1954</i> ★★★★★; see also <i>Tarantula, 1955</i> ★★★★★)
Feb. 5, 7	(<i>When Dinosaurs Ruled the Earth, 1969</i>) ☞ Thursday, 5 Feb Quiz #1 (50points); ☞
Feb. 12, 14	Volant vertebrates: Scaling, biomechanics and aerodynamics (<i>Rodan, 1953</i> ★★)
Feb. 19, 21	Volant invertebrates: Scaling, Biomechanics, aerodynamics. (<i>The Deadly Mantis, 1957</i> ★★; see also <i>Mothra, 1962</i> ★★★★★)
Feb. 26, 28	Aquatic animals: Diving Physiology, Reynolds number, flow, and locomotion. (<i>It Came From Beneath the Sea, 1955</i> ★★; see also <i>Jaws III</i> ★; <i>Creature From the Black Lagoon 1954</i> ★★★★★; <i>Godzilla 1998</i>)
Mar. 5, 7	Fossorial critters: Biomechanics, scaling, and physiology (<i>Tremors</i> ★★★★★; <i>The Mole People, 1956</i> ★★; see also <i>Dune, 1984</i> ★★★★★)
	☞ Thursday, 7 March Quiz #2 (50points); ☞
Mar. 12, 14	<i>Spring Break</i>
Mar. 19, 21	The physiology of gigantism: scaling of the cardiovascular and nervous systems (<i>King Kong, 1932</i> ★★★★★)
Mar. 26, 28	The development of monsters: Eggs, babies, and my how you've grown! (<i>Alien, 1982</i> ★★★★★; see also <i>Twenty Million Miles to Earth, 1957</i> ; <i>Godzilla 1998</i>)
April 2, 4	The ecology of giants: trophic relationships (<i>The X-Files, "Big Blue"</i> ★★★★★; see also

The Secret Of The Loch, 1934)

- April 9, 11 The evolution of monsters, relic populations and MVP (*The Planet of the Apes, 1968 ☆☆☆☆, see also The Creature Walks Among Us, 1956 ☆☆*)
- April 16, 18 Commie monsters: Parasitoids and other body snatchers (*Invasion of Body Snatchers 1956 ☆☆☆, see also Invasion of Body Snatchers, 1978 ☆☆☆, The Thing, 1951 ☆☆☆ & 1985 ☆☆☆*)
- April 23, 25 Exobiology: Critters from other planets.
- April 30, May 2 ☞ **Thursday, 2 May Quiz #3 (50points);** ☞
- May 8 (Tues) Final Papers due

Grading:	Exams (50 x 3):	150 pts
	Papers:(20 x 5)	100 pts
	Final Paper	<u>50</u>
	Total:	300