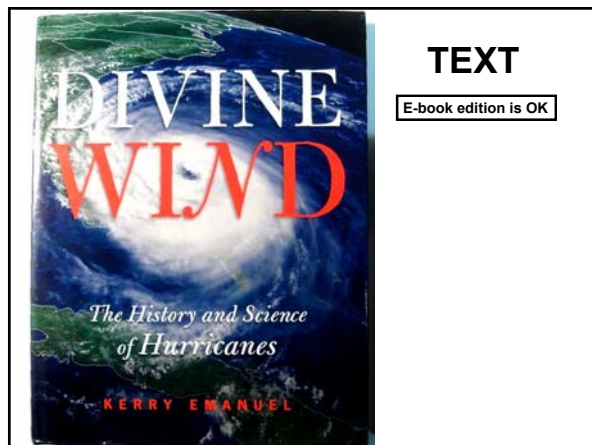


Course Organization

- MWF 11:00-11:50 AM, AHC5-357
- H. E. Willoughby, 305-348-0243, AHC5 363, hugh.willoughby@fiu.edu
- Office Hours: Mon. 10:00-11:00 AM & Tue 1:00-2:00 PM, Wed. 2:00-3:00 PM, or by appointment
- No prerequisites.
- On-line syllabus at: http://faculty.fiu.edu/~willough/met_4532/0_Syllabus.pdf
- On-line notes: http://faculty.fiu.edu/~willough/met_4532/0_LINKS.html . Note underscores instead of spaces.
- Occasional weather discussion and comments



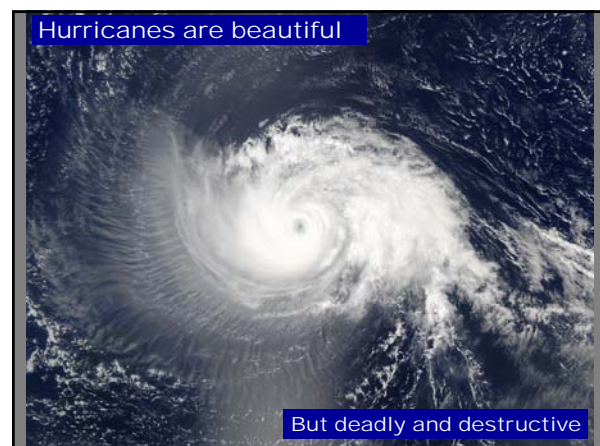
Grades:

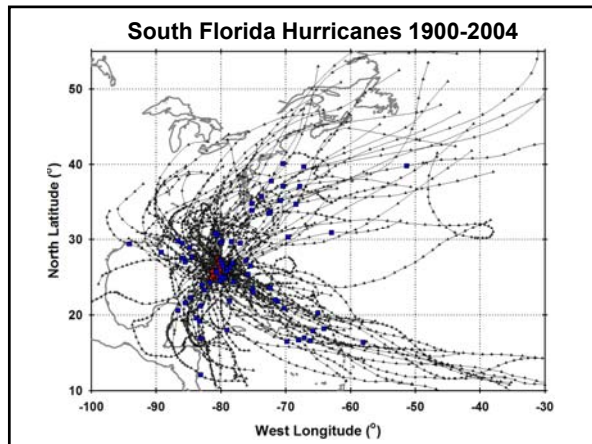
Grading Scale	
100-90	A
89-80	B
79-70	C
69-60	D
below 60	F

Grade Components	
Participation	15%
Exam #1	20%
Exam #2	20%
Paper	20%
Final	25%
Total	100%

Assignments:

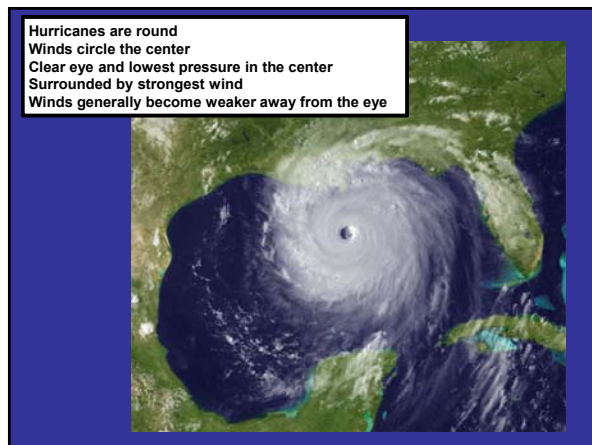
- Look over Syllabus
- For this time: "*Kamikaze* (E pp. 1-5)," and *Huricán* (E. 18-22)
- For next time:
 - E 30-32: Columbus
 - E 63-66: 1780
 - SW 3-30: Early History
- Be thinking about a paper topic
- Watch the weather...





The voice of the sea is never one voice, but a tumult of many voices—the mutterings of multitudinous dead,—the moaning of innumerable ghosts, all rising, to rage against the living, at the great Witch-call of storms...

—Lafcadio Hearn (1850-1904), *Chita: A Memory of Lost Island*



Hurricanes are round
Winds circle the center
Clear eye and lowest pressure in the center
Surrounded by strongest wind
Winds generally become weaker away from the eye

Kublai Kahn's Invasions of on Japan, 1274 & 1281 CE



KUBLAI KAHN'S FIRST TYPHOON

- Genghis Kahn's grandson
- Inherited an empire that had conquered Northern China in 1259 CE
- Set out to conquer Japan in 1274
- Korean ships and sailors
- 40,000 troops/sailors including 25,000 Mongols
- Landed on NW coast of Kyushu
- Destroyed by a typhoon overnight Nov 19-20
- Marco Polo arrived in Beijing the next year.

KUBLAI KAHN'S SECOND TYPHOON

- Conquered all of China by 1279 CE
- Set out to conquer Japan again in June 1281
- Two armadas
- 40,000 troops/sailors in one 100,000 in the other
- Landed on NW coast of Kyushu again
- Japanese resisted until August
- Mongol fleet destroyed by a Typhoon on 15-16 August.
- Archaeological artifacts found in Imari Bay
- Kamikaze & Typhoons in WWII

Origins of Names

- **Jurakan**
 - Bad-guy brother in Carib (Taino) or Maya creation myth.
 - Depicted with cyclonically spiraling arms
 - Jurakan → Huracán → Hurricane
- **Typhoon**
 - Chinese *jufeng* wind from four directions, or scary wind, or *heifeng*, black storm/wind...
 - Greek Earth demon Typhon, son of Gaia & Zeus, human body and serpent legs
 - Arabic *tufan* = violent wind
- **Cyclone**
 - Coined by Piddington (19th Century mariner and weather scholar)
 - Coils of a serpent



Summary

- Hurricanes are beautiful, but
- ...they destroy property and kill people.
- Circular vortices smaller, but more intense, than middle-latitude frontal cyclones
- *Kamikaze* frustrates Kublai Khan's invasions of Japan (1274 & 1281)
- Hurricane, Typhoon, Tropical Cyclone

Assignments:

- Look over Syllabus
- For this time: "*Kamikaze* (E pp. 1-5)," and *Huracán* (E. 18-22)
- For next time:
 - E 30-32: Columbus
 - E 38-39: *La Floride*
 - E 63-66: 1780
 - SW 3-30: Early History
- Be thinking about a paper topic
- Watch the weather...

FINIS

Graduate Students: Special recitation time/place TBA

Grade Components	
Problems and recitation	25%
Exam #1	15%
Exam #2	15%
Paper	25%
Final	20%
Total	100%