**Biology of Sharks (BIO 454 or 554)**

**Spring 2018**

Dion 110, Tuesday and Thursday, 12:30 – 1:45PM

Instructor: Dr. Jeff Kneebone, [jkneebone@umassd.edu](mailto:jkneebone@umassd.edu), Violette Research: 115

Office Hours: Thursday 12:00 – 12:30 PM & 1:45 – 2:15 PM; otherwise by appointment only.

Course overview and objectives: The academic contents of this course are very intensive and require the student to strongly commit adequate time for the reading of all assign material and to attend lectures. This course introduces the student to the diversity of extinct and extant sharks and will provide an overview of chondrichthyan evolution, physiology, life history, and ecology with an emphasis on form and function. In addition, this course will increase the students overall academic skills by requiring additional readings in relevant scientific literature.

Recommended, but not mandated reading material:

Carrier, J.C., Musick, J.A. and Heithaus, M.R. 2004. Biology of sharks and their relatives. CRC Press. 596 pp.

Carrier, J.C., Musick, J.A. and Heithaus, M.R 2010. Sharks and Their Relatives II: Biodiversity, Adaptive Physiology, and Conservation. CRC Press. 736 pp.

Carrier, J.C., Musick, J.A. and Heithaus, M.R. 2012. Biology of sharks and their relatives. Second Edition. CRC Press. 666 pp.

Moyle, P. B. and Cech, J. J. 2004. Fishes: An Introduction to Ichthyology. 5th Ed. Prentice Hall. 672 pp;

Nelson J. S. 1994. Fishes of the World Wiley and Sons

Multiple chapters from Fish Physiology (Academic Press series).

However, there is always a need for supplement reading material from leading journals and specific reprints for topics of interest will be made available through the website (http://fishecophysiology.net).

Class etiquette: The lectures end at ~1:45PM, but if anyone in the lecture is discussing course-related material, you must wait until the verbal exchange is finished before leaving the classroom (do not pack your belongings and create a distraction, wait until we are done). Please turn off cell phones and other electronic devices prior to entering the classroom and if they absolutely must be on for emergency purposes, please make sure that they are silenced. Not texting is allowed and if you have to engage in a phone conversation, you must do so outside of the lecture hall, where your colleagues cannot hear you. No matter how tempting, please no sleeping or reading during the lecture.

Grading: There will be 3 lecture exams each worth 100 points.

100 to 93% = A 92 to 90% = A-

89 to 87% = B+ 86 to 83% = B 82 to 80% = B-

79 to 77% = C+ 76 to 73% = C 72 to 70% = C-

69 to 67% = D+ 66 to 63% = D 62 to 60% = D-

59% or lower = F

In accordance with University policy, if you have a documented disability and require accommodations to obtain equal access in this course, please meet with the instructor at the beginning of the semester and provide the appropriate paperwork from the Disabled Students Services Office.  The necessary paperwork is obtained when you bring proper documentation to the Disabled Students Services Office (DSS), which is located in Group I, Room 016; phone: 508-999-8711.

**Proposed schedule**



A Carrier, J.C., Musick, J.A. and Heithaus, M.R. 2004. Biology of sharks and their relatives. CRC Press. 596 pp.

B Carrier, J.C., Musick, J.A. and Heithaus, M.R 2010. Sharks and Their Relatives II: Biodiversity, Adaptive Physiology, and Conservation. CRC Press. 736 pp.

C Carrier, J.C., Musick, J.A. and Heithaus, M.R. 2012. Biology of sharks and their relatives. Second Edition. CRC Press. 666 pp.