

Course Syllabus, Spring 2013  
**BE 7381 ADVANCED AQUACULTURAL ENGINEERING**

Dr. Hall, Spring 2013, Evening TBD, 115 E.B.Doran

**Credit Hours:** 3 (3 hours lecture/lab with design/project component)

**Course Description:** *Prerequisites: BE4380 (Aquacultural Engineering) or Permission of Instructor*



2/28

2/28 Waste Management (Ch 6)

{Proposals Due}

3/7 Marine Systems (Lekang)

3/7 Biofiltration (Saidu) (Ch. 7,8)  
{Prelim. Project Report}

3/7 **Proposal Reviews and Presentations**

3/14 Biofilter Design (Saidu, Malone) (Ch 8, 9)

3/14 Recirculating Systems II

3/21 Gas Transfer (Ch 10)

3/21 Environmental/Trophic Issues Discussion Day (Hutchinson)

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5/13-18

Final Exams

**Official Date of Final Examination TBA**

Communication Intensive Course

BE 7381 is a communication intensive course. Project 1 (proposal) and Project 2 (Paper and presentation), as well as at least one guest lecture will each be required. The two focus modes are written and spoken, but we will also use some technological communication. Specific activities for each mode are as follows:

Mode 1: Written Communication

Informal activities for Writing Mode: Writing: lab notebooks will be kept and reviewed; written reviews of primary literature (e.g. scientific journal articles) and written -3(ten r)5(e)4(view)4(s of pr



Oysters: toxicity, salinity studies

Oysters: as components of architectural systems (Byrum et al.)

## **Additional References, BE 7381 Aquacultural Engineering**

(Should be at Library)

Lekang, Odd-Ivar, 2008. Aquaculture Engineering, Blackwell Publishing, 340 pp.

Reference Text: Lawson, Thomas, 1995. Fundamentals of Aquacultural Engineering. Chapman and Hall.

Hutchinson, Lawrence, 2005. Ecological Aquaculture. Permanent Publications, 149 pp.

Huguenin, J.E. and Colt, J., (1989), Design and operating guide for aquaculture seawater systems, Elsevier Scientific Publishing Co., Amsterdam, 264 pp.

Timmons, M.B., Losordo, T.M., editors, (1994), Aquaculture water reuse systems: engineering design and management, Elsevier Scientific Publishing Co., Amsterdam, 333 pp.

Wheaton, F.W., (1977), Aquacultural Engineering, Wiley, New York, 708 pp.

(Websites)

Handouts from Dr. Hall

C-I course statement: *This is a certified Communication-Intensive (C-I) course which meets all of the requirements set f*

*instruction and assignments emphasizing informal and formal [mode 1] and [mode 2];*

*teaching of discipline-specific communication techniques;*

*use of draft-feedback-revision process for learning;*

*practice of ethical and professional work standards;*

*40% of the course grade rooted in communication-based work; and*

*a student/faculty ratio no greater than 35:1.*

*Students interested in pursuing the LSU Distinguished Communicators certification may use this C-I course for credit. For more information about this student recognition program, visit [www.cxc.lsu.edu](http://www.cxc.lsu.edu).*