

Lecture #	Topic of Lecture
1	Physico-chemical characteristics of water
2	Determination of Dissolved Oxygen
3	Alkalinity
4	pH
5	Ammonia
6	Limnology
7	Composition of water
8	Biogeochemical Cycle
9	Biogeochemical Cycle
10	Biogeochemical Cycle
11	Biogeochemical Cycle
12	Ecology of aquatic animals
13	Ecology of aquatic animals
14	Effect of water quality on Environment and
15	Effects of metal and industrial contaminant
16	Eco-toxicology
17	Pollution and its effects on aquatic life
18	Bio-accumulation and bio-magnification of

Courses Content of water quality and

Links and References	Online Video Lectures
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<https://books.google.com.pk/books?id=2r8GCAAAQBAJ&printsec=frontcover&dq=water+quality+in+fish+pond&hl=en&sa=X&ved=0ahUKEwixhJvMjpDpAh>

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Zhou, L., & Boyd, C. E. Ammonia Nitrogen Management.

Limnology 1 (PDF) Pg 2 -11

Limnology 5 (PDF) Pg 103-117

Limnology 10 (PDF) Pg 349

Limnology 10 (PDF) Pg 351-353

Limnology 10 (PDF) Pg 349-351

Limnology 10 (PDF) Pg 354

Limnology 8 (PDF) Pg 250, 272-278

Limnology 8 (PDF) Pg 290-293

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Mugg, J., Serrano, A., Liberti, A., & Rice, M. A. (2007). Aquaculture effluents: A guide for water quality regulators and aquaculturists. *NRAC Publication, No. 00-003* .

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<https://www.youtube.com/watch?v=yEci6iDkXYw>

Sarkar, Ram Rup & Malchow, Horst. (2006).
Nutrients and toxin producing phytoplankton control
algal blooms - A spatio-temporal study in a noisy
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10.1007/BF02703573.

fish management

Link Description

Chapter no. 3 water Quality requirements

Amount of DO in Pond

Alkanity and hardness level in aquaculture

Ph, Carbon dioxide level in Pond

Limnology; Concept and Contribution,History and Development

Dissolve substance in wate

Carbon Cycle

Nitrogen Cycle

Phosphorus Cycle

Silica Cycle

Types of Zooplankto, Fish (Fish production and limnology)

Bioindicators (Organisms as indicator of pollutions in Natural Bodies

Aquaculture effluents and water pollution

Effluents, Types of wastes which effect aquaculture

