Course structure:

THEME 1: Lecture series
1) Fundamentals of biogeochemical cycles (3 Lectures)
2) Fundamentals of ecosystem modeling (4 Lectures):
3) Advances in end-to-end food web modeling (4 Lectures):

THEME 2: Hands on use of modeling tools
1) Simpler theoretical models
2) Complex coupled physical-biogeochemical models

THEME 3: Participant presentations (oral and poster)

THEME 4: Debates on hot topics (2 Lectures)

Days	Morning (09.00-12.30)	Afternoon (14.00-17.30)
Monday 11 August	L1 (09.00-10.30) Welcoming remarks and course structure	L3 (14.00-15.30) **I. Allen:** *Fundamentals of ecosystem modeling (1):* Processes and parameterizations
	L2 (11.00-12.30) **J. Zhang:** Fundamentals of biogeochemical cycles (1)	L4 (16.00-17.30) **M. St John & T. Oguz:** *Fundamentals of ecosystem modeling (2):* Trophic controls
Tuesday 12 August	L5 (09.00-10.30) **J. Zhang:** Fundamentals of biogeochemical cycles (2)	(14.00-17.30) *Hands on use of modeling tools:* Simpler theoretical models **(T. Oguz, I. Allen & B. Salihoglu)**
	L6 (11.00-12.30) **M. St John:** *Fundamentals of ecosystem modeling (3):* Climate-induced controls through temperature, stratification, nutrient fluxes, and phytoplankton community structure	
Wednesday 13 August	L7 (09.00-10.30) **I. Allen:** *Advances in end-to-end food web modeling (1):* coupled physical-biogeochemical models	(14.00-15.30) Presentations and discussion of hands on model exercise **(T. Oguz, I. Allen)**
	L8 (11.00-12.30) **J. Zhang:** Fundamentals of biogeochemical cycles (3)	(16.00-17.30) 10 min individual presentations **(B. Salihoglu)**
Thursday 14 August	L9 (09.00-10.30) **M. St John:** *Fundamentals of ecosystem modeling (4):* Climate-induced controls through habitat modification	(14.00-17.30) *Hands on use of modeling tools:* complex coupled physical-biogeochemical models **(I. Allen, T. Oguz, B. Salihoglu)**
	L10 (11.00-12.30) **I. Allen & M. St John:** *Advances in end-to-end food web modeling (2):* Plankton functional type models: ecology vs biogeochemisty, aggregation, complex adaptive systems	
Friday 15 August	L11 (09.00-10.30) **M. St John & T. Oguz:** *Advances in end-to-end food web modeling (3):* IBMs and their coupling with lower trophic level models	(14.00-15.30) Presentations and discussion of hands on model exercise **(I. Allen, T. Oguz)**
	L12 (11.00-12.30) **I. Allen:** *Advances in end-to-end food web modeling (4):* Model skill assessments	(16.00-17.30) 10 min individual presentations **(B. Salihoglu)**
Saturday 16 August	L13 (09.00-12.00) Debates on hot topics, assessment of the training course, and closing remarks. **(Moderator: M. St John)**	