

Program for the UAK Research school at Espegrend marine biological station 10-14 June

Monday - June 10th	
Joint Acoustics and Optics: Lecture Room	
0830-1000	Meet at Espegrend. Move into rooms.
1000-1030	Arne: Welcome, practicalities, introduction of instructors and students
1030-1115	Peter Worcester (SIO): Underwater Acoustics Overview Lecture
1115-1200	Daniel and Arne: Optics Overview Lecture
1200-1300	LUNCH
1300-1345	Torunn Sagen (UiB): Fjord oceanography Lecture
1345-1430	Espen Storheim: Lecture/practical exercise: Safety, ropes and knots.
1430-1500	Peter Worcester: Lecture/practical work: O-rings and connectors

After 1500 Optics and Acoustics have separate planning

Tuesday - June 11th			
Optics		Acoustics	
		Until 0825	Breakfast Tidy rooms Clean common areas.
0830	Meet to start loading boat	0825	Meet in lecture room.
0900-1200	Measurements from the boat, station A and B* (time permitting): - Secchi depth - Ramses surface - ACS profile and surface - RBR CTD+tridente, and LISST-200X profile, profile and surface - Water samples: 15L from surface at both locations	0830-1200	Data processing and preparations: - Plot sound speed profiles and make ray predictions. - Plan locations and depths for the active source transmissions. - Prepare and stage equipment for fieldwork.
1200-1300	LUNCH	1200-1300	LUNCH
1300-1800	Labwork: - Filtration and water sample procedures - Chl-a and SPM measurements	1300-1600	Fieldwork: - Take CTD's - Deploy acoustic recorder and instrument array.
		1600-1800	Rinse equipment, offload data, charge batteries, and secure metadata.

Wednesday - June 12th			
Optics		Acoustics	
		Until 0825	Breakfast Tidy rooms Clean common areas.
0830	Meet to start loading boat	0825	Meet in lecture room.
0900-1200	Group A: Measurements from the boat, station A and C	0830-0915	Lecture: Espen Storheim - Practical introduction to data management

	<ul style="list-style-type: none"> - Secchi depth - Ramses surface - ACS profile and surface - RBR CTD+tridente, and LISST-200X profile, profile and surface - Water samples: 15L from surface at both locations Group B: Data processing		
		0930-1200	Data processing and preparations: <ul style="list-style-type: none"> - Prepare acoustic sources for transmissions. - Prepare and stage equipment for fieldwork.
1200-1300	LUNCH	1200-1300	LUNCH
1300-1800	Group A: Filtration Group B: Radiative transfer modelling	1300-1600	Fieldwork: <ul style="list-style-type: none"> - Transmit source signals at planned locations. - Recover recorders
		1600-1800	Rinse equipment, offload data, charge batteries, and secure metadata.

Thursday - June 13th			
Optics		Acoustics	
		Until 0825	Breakfast Tidy rooms Clean common areas.
0830	Meet to start loading boat	0825	Meet in lecture room
0900-1200	Group B: Measurements from the boat, station A and C <ul style="list-style-type: none"> - Secchi depth - Ramses surface - ACS profile and surface - RBR CTD+tridente, and LISST-200X profile, profile and surface - Water samples: 15L from surface at both locations Group A: Data processing	0830-1200	Data processing and preparations: <ul style="list-style-type: none"> - Process acoustic data. - Plot spectrograms of active and passive recordings. - Prepare and stage equipment for fieldwork.
1200-1300	LUNCH	1200-1300	LUNCH
1300-1800	Group B: Filtration Group A: Radiative transfer modelling	1300-1600	Fieldwork: <ul style="list-style-type: none"> - Take CTD's - Additional source transmissions - Transmission of custom sound signals
		1600-1800	Rinse equipment, offload data, charge batteries, and secure metadata.

Friday - June 14th	
Joint Acoustics and Optics: Lecture Room	
Until 0825	Breakfast Tidy rooms Clean common areas.
0825	Meet in lecture room

0830-1200	Students work on preparing presentations/Instructors pack instruments and equipment
1200-1300	LUNCH
1300-1330	Student Presentations: Optics Group A
1330-1400	Student Presentations: Active Acoustics
1400-1430	Student Presentations: Optics Group B
1430-1500	Student Presentations: Passive Acoustics
1500-1530	Audiovisual competition
1530	Closing remarks and summary
1600-1700	Clean rooms and common areas. Move out.