Emnerapport BIO213, Høst 2014 ved Dag L Aksnes

Generelt - Det var 30 studenter som fullførte kurset, dvs som leverte inn 3 godkjente essays og møtte til eksamen. Det var ikke frafall i perioden fra første innlevering til eksamen. Frammøte på forelesningene var stabil (med unntak av et par fredag kl 14.15 forelesninger – se under) og lå på omkring 15 studenter. Studentene utgjorde en 50/50 blanding av utenlandsstudenter som oppholder seg et semester eller to ved UiB samt norsktalende fiskehelsestudenter som har kurset som obligatorisk. Fabian Zimmerman underviste to dobbelttimer (fiskeri/havbruk) og stod for gjennomføring/godkjenning av den ene av essay-innleveringene. Øvrig undervisning og eksamen ble utført av undertegnede.

Studentevaluering av emnet – Dette ble ikke gjennomført i 2014

Svakheter ved årets gjennomføring

- Det var svært knapp tid til å forberede forelesninger o.a. (første gang jeg underviste dette kurset) og dette gikk klart utover kvaliteten på undervisningen. Undervisningen startet umiddelbart etter avsluttet forskningstermin (1.9) som også omfattet større oppdrag for universitetsledelsen i forhold til Innovestsaken og EnTek-bygget.
- Kursbeskrivelsen forutsatte at det foreleses på engelsk og det bidro til svekkelse av kvaliteten av forelesningene særlig i forhold til de norsktalende studentene.
- Heterogen studentgruppe hvorav ca halvparten var utenlandsstudenter med ulik bakgrunn, uten norsk kunnskaper og til dels dårlige engelsk kunnskaper. Den andre halvparten var norsktalende hvorav hoveddelen var fiskehelsestudenter (kurset er obligatorisk for disse).
- Forelesninger var lagt til tirsdag og torsdag, men av hensyn til et annet kurs ble tirsdagsforelesningen på et tidlig tidspunkt flyttet til fredag 14-16. Det resulterte i stort frafall (ca 2/3) på fredager.

Tidligere evalueringer/emnerapporter – Ukjent. BIO213 var ikke oppført under emner i kvalitetsdatabasen

Planlagte forbedringer 2015

- All den tid kurset er obligatorisk for fiskehelsestudenter er det uklart hvorfor dette bachelorkurset skal gjennomføres på engelsk. Neste år legges det opp til at kurset undervises på norsk og i noen større grad tilpasses «norske forhold».
- Ved å benytte læringsmateriell på engelsk legges det opp til at utenlandsstudenter også skal kunne følge undervisningen.
- Læreboken som ble benyttet er grei å lese (dette ble også meddelt muntlig fra noen av studentene), men
 jeg erfarte at den er lite egnet som direkte forelesningsunderlag. Neste år legges det opp til at
 forelesningene og tilknyttede læringsmateriell/ aktiviteter i større grad gjøres uavhengig av læreboken.
 Egenlesning av læreboken er imidlertid nyttig da den introduserer viktige begreper og gir god oversikt over
 litteratur i marin økologi.
- Det vil bli utarbeidet læringsmateriell som innrettes for en sterkere kvantitativ forståelse av marin økologi og biologisk oseanografi. Økt vekt på å introdusere eksempler som er relevant for norske hav- og kystområder og havbruk.
- Det legges opp til å involvere studieadministrasjonen ved BIO til å gjennomføre en studentevaluering av kurset.

Evalueringsrapport BIO310 - Introduksjon til Marine feltmetodar hausten 2014

Oppmelde: 9 studentar (5 kvinner og 4 menn)

Karakterfordeling var:

Karakter	Antal	Kvinner
A	-	-
В	2	2
C	4	3
D	3	-
Е	_	_

Karakterfordelinga viser at C er gjennomsnittskarakteren. Ingen fekk A. Begge som fekk B var kvinner og alle som fekk D var menn. Karakterane i år var svakare enn tidlegare år. Dette kan dels skuldast at det under eksamenstida som var avtalt for BIO310 i god tid på førehand, kom opp tidlegare ikkje planlagde aktivitetar i BIO300. Dels kan dette også skuldast for tett program med feltkurs i haustsemesteret. Sjå under tiltak for fleire vurderingar.

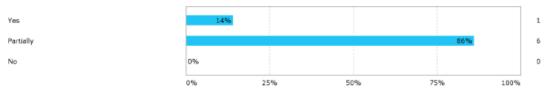
Studentevaluering:

Det blei utført studentevaluering etter avslutta kurs og eksamen. 7 av 9 studentar svarte.

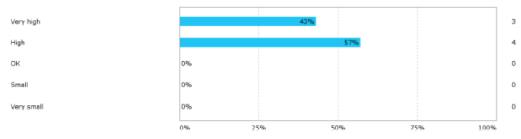
Eigenevaluering:

Det var liten innsats før undervisinga. Berre 1 av studentane synes å ha førebudd seg før forelesingar og feltkurs. Dette var skuffande. Særleg sidan forelesarane har utarbeidd ei håndbok om «Introduksjon til Marine Feltmetodar». Dei fleste var på førelesingane. Det blei også lasta ned forelesingsnotatar på MiSide før kvar forelesing. Alle hadde likevel lagt mykje arbeid ned i kurset. Dette må ha vore då dei var på feltkurset, og då dei skreiv heimeeksamen, som var å skriva ein grundig feltrapport om metodar og analyse av data samla inn.

Did you prepare before the lectures using the Handbook?

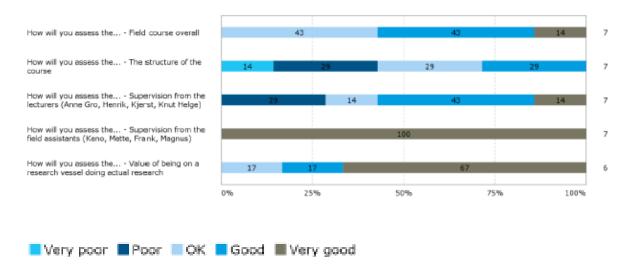


How will you assess your own work input to the course?



Evaluering av feltkurset:

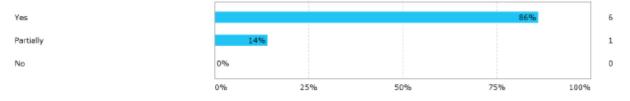
Totalinntrykket av feltkurset er positivt, og verdien av å vera på forskingsskip vert sett pris på. Men nokre studentar klagar på at organiseringa var dårleg og at og at dei fekk lite hjelp av forelesarane. Feltassistentane får derimot toppkarakter. Og dette er bra ettersom feltassistentane under toktet har fått delegert ansvaret for opplæring i det praktiske.



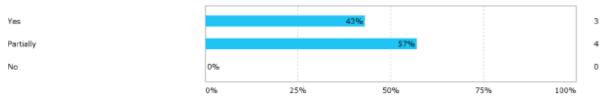
Evaluering av eksamensform:

Studentane er nøgd med eksamensforma, men har nokre kommentarar til gjennomføringa og omfang på feltrapporten.

Do you consider the exam form (extensive field report) suitable for the course?



Have you received sufficient information about the exam?



Kva synes studentane vi kan gjera betre? (utval av kommentarar henta frå evalueringa)

Kommentar om feltrapport/heimeeksamen som endeleg eksamen & forelesingar:

"Have you received sufficient information about the exam?"

- It (feltrapport) is the best way to show our findings, and the methods we used to get them.
- I feel I get to show my knowledge this way...
- I think the specifications of how the report should be written was late, an vague. I also think 3500 words is a low max-limiting written word, seeing we where toll do write an IMRD-report, and this means very much of the report will consist of describing m&m. This doesn't leave much room for the other parts, so either give a higher max word limit, or specify what is relevant for the m&m so that irrelevant parts can be dropped.
- it took very long time before we got the length and pictures demanded on the report.
- Some clear guidelines on the structure of the report.
- Eventually, we gained all the information we needed.
- We all had a lot of questions regarding the report structure that could have been explained and dealt with more swiftly.
- Also, the Word limit really confined what we have learned, and could misrepresent Our gained knowledge from the course. I suggest a higher Word Count (Maximum 4000) is more appropriate for such a large study (3 mini-essays). There was not much direction on what should have been included for the Benthic portion of the report.
- The Word limit is way too low for a report of this size. I condensed all my work as much as possible, and I was not able to discuss anything except the most basic findings. I am left being very frustrated as I had read and written a lot more that I could not use at all because of the Word limit.
- Also, the demersal/benthic (which was a confusing enough distinction to make on its own)
 was lacking any Clear intentions as to why we did it. I think we could have been given, or
 discussed together beforehand, the hypotheses that we wanted to test, as it was difficult to
 relate questions we had to the data we collected.

Andre innspel:

- Statistics lectures were convoluted, confusing and essentially showing us how to copy and
 paste. This took the focus of the course away from the Methods, and on to statistics which,
 while important in producing graphs etc., was pointless to make every single person do
 exactly the same way.
- The statistics afterwards were really confusing and time consuming.

- Lectures were spread too far apart after the cruise. This is an intensive course, the lecture distribution should have been the same.
- Could have been more usefull if it was actually set up more evenly between groups, so all groups got to see all aspects of the fieldwork, instead of just counting fish.
- More emphasis should have been put on the Methods themselves, and less on the Writeup. A lot of Methods were shown on the cruise that were irrelevant for the essay.
- The course is called marine Methods, but appears more to be a study of DVM... I was expecting to have to Write about various trawling and sampling Methods, assessing strengths and weaknesses and Learning how to Select the appropriate Equipment etc
- the topic Supervision from the lecturers/ the field assistants could be done by person
- "Value of being on a research vessel doing actual Research" I find this question misleading, as it was mainly the ship technicians doing the work (e.g. CTD, light meter), and not the students. The workload was heavily imbalanced towards the 12-6 Group, and so the 6-12 Group missed out on potentially important instructions on Methods. Special commendations to Kjersti and Frank, they were very helpful on this course.
- I felt we learnt how to process the animals well, but we never had any training or got to observe any of the other aspects of the cruise, such as Reading the echo location Devices.
- Cruise leadership and structure can be improved.
- While the Field course was a fantastic opportunity, I felt let Down by the organization. Students were not allowed to do very much hands-on practical work (which is why I took the course in the first Place), and parts of the demersal/benthic study were very confusing. The workload between Groups on the cruise was imbalanced, and very little detail was given as to what should have been included in the report.
- Some aspects were great, and I do feel I learnt quite a bit. But I feel too much time was spent in the fishlab doing the same exercise.

Did the course easily combine with other courses this semester (work load and schedule)? If no, why? –

- No
- Yes it did, because if you think ahead you could easily have bio310 out of the way before the other exams, and still get to celebrate christmas without exams hanging over you.
- It interfered with revision for other courses. I would prefer to have finish the course earlier in the semester, so it did not interfere with other exams.
- Did not combine well at all with marine faunastics and general exam preparations. I had hardly anything to do at the beginning of term and could have finished both bio310 and faunastics much earlier. very poorly managed.

Is there anything you regard as particularly positive in the course?

- It is very positive that we did go on a cruice.
- The field trip was really good and interesting. To be part of a actually study that is much larger than a normal "school project" was very usefull and I've learned a lot about how to conduct a study and investigate a research question.
- the opportunity of being in a research vessel.
- Practical experience on a Research vessel.
- Frank was a great supervisor.

Is there anything you regard as particularly negative in the course?

- I think the workload between the different shift was distributed poorly. This was obvious from the start and could have been improved upon while on the cruise, but it wasn't.
- The cruice was poorly organized. There was a huge difference in work load between the two groups, and in resting time we had to go to summary lectures that I think wasn't useful, especially when you just want to sleep.

Is there anything you were hoping to learn that wasn't in the course?

- How the trawls actually was put out in the sea. It was only the last day we were shown the room where it was possible to see the trawls going out. I also wanted to lern more about why we cought the fishes that we did. Also after the 10th bucket of fish from the multisamlper you didn't learn anything new, so the learning output was considerable lower than i expected.
- It was all pretty much covered.
- I was confused as to what we were meant to learn. I would have liked to learn more about the Acoustics

Other comments, suggestions or improvements for the future?

- I think it will be more useful in the future to cut down on the working hours. There were times when we just sat there and had nothing to do, with no possibility to sleep. Other times there were so much to do that we had to work overtime. If not cuting down the working hours, spread the work evenly throughout the working hours.
- Maybe a bit better organized and structured.
- Allow the students to have more hands-on, practical experience With the Equipment, how it Works, what it does, and how to interpret the results.

_

Oppsummering og forslag til betring

Koordinering mellom BIO310 og andre kurs:

Hausten 2014 var koordineringa med andre kurs ikkje optimal. Dette var overaskende, særleg ettersom vi våren 2014 hadde hat møteverksemd om korleis vi kunne betra fordelinga av arbeidsmengden til studentane i haustsemesteret. Til dømes hadde BIO310 fått opplyst om at feltrapport i BIO300 skulle vera ferdig til 1. desember. Med utgangspunkt i dette sette BIO310 eksamensdato for innlevering av heimeeksamen til 15. desember. Då skulle dei kunna bruka det dei lærte i BIO300 til eksamen i vårt kurs. Diverre gjekk ikkje dette slik det var planlagd. Studentane hadde både 2-vekers feltkurs i faunistikk, heimeeksamen i BIO300, samt mange ulike obligatoriske aktivitetar i BIO300 heilt fram til 19. desember. Etter klager frå studentane, blei det mogleg for BIO310-studentane å levere på nytt ein revidert heimeeksamen til 5. januar. Likevel blei karakterane, og feltrapportane ein del svakare enn det vi har sett tidlegare for dette kurset. Vi trur at dette dels skuldast koordinering med BIO300, for mykje undervising og feltkurs i haustsemesteret, og dels tema som vi i BIO310 kan bli betre i.

Forslag til tiltak: Revisjon av undervising og endring i fordeling mellom haust og vår, og betra koordinering mellom haust-kursa (særleg BIO300). (Ansvar: Studieseksjon og Programstyre?)

Spørjeskjemaet:

Det er noko uklart enkelte stader og treng litt revisjon. Men vi er nøgde med at dei fleste svarte. Då skulle vi ha fått med hovudvurderinga sjølv om gruppa var liten.

Tiltak: revidere spørjeskjemaet. (Dette har lærarane på BIO310 nå gjort)

Forelesingane:

Forelesingane før feltkurset får god vurdering, men vi får kritikk for dei etter feltkurset. Både innhald, struktur og tidspunkt. Studentane ønska desse forelesingane like etter feltkurset slik at dei kan arbeide med feltrapporten medan det dei lærte framleis er ferskt i minne. Etter feltkurset skal kurskoordinator reinske datafiler studentane har laga under toktet, og så laga ei oppsummering over funna. Studentane skal så få datasettet dei samla inn om bord, og dei skal lære å lage figurar og enkle statistiske analysar ved å bruka standard-analyseverktøyet vi brukar ved BIO, nemleg R. Alt er beskriven i Håndboka som studentane får ved studiestart. Før toktet går vi gjennom reiskapar og korleis å handsama prøvane som tas opp. Sjølve gjennomgangen av korleis vi analyserer data skjer etter toktet. Dersom desse forelesingane hadde blitt gitt like etter toktet, kunne studentane har gjort seg ferdig med heimeeksamen i BIO310 før dei starta på nytt feltkurs i faunistikk, og før statistikkeksamen og andre større innleveringar i BIO300.

Forslag til tiltak:

- 1) Veka etter feltkurset vert øyremerka undervising i BIO310 (Ansvar??).
- 2) Utviding, gjennomgang og endring av rekkefølge av forelesingar etter feltkurs.

Feltkurs:

Feltkurset om bord i forskningsskip går som eit vanleg forskingstokt med arbeid i normal skiftordning. Det er 3 habitat som er dekka: pelagialen (mesopelagiskeorganismar og døgnvandring), blautbotn, og hardbotn/stranssona. Dette krev nøye planlegging på førehand mop på fordeling av prøvetaking dag og natt (lyset under toktet bestemmer fordeling av stasjonar mellom dag og natt), og bruk av mange ulike typar reiskap. Dei som har vore på forskingsstokt veit at det skjer uforutsette ting, og at planar må justerast undervegs, og at det er toktleiar sitt ansvar å få dette til å gå best mogleg, og å delegere arbeidsoppgåver til skifteiarar og å justere det som er mogleg. Vi har fått kritikk frå nokre av studentane på at toktet var dårleg organisert: dette ser ut til å henge saman med at nokon meinte det var ulik arbeidsfordeling mellom skifta, samt at det ikkje var noko å gjera heile tida. Dei har sjølvsagt ikkje heilt innsikt i organiseringa og arbeidsdelinga på eit tokt. Vi fekk dessutan kritikk på at dei ikkje fekk «hands-on» opplæring på reiskapen (noko som skuldast HMS-reglement på båtane – berre mannskapet skal handsame stort utstyr), og at dei fekk for lite innsikt i korleis dei ulike reiskapane verka, og at toktleiinga ikkje var tilstrekkeleg. Dei etterlyste også meir om blautbotnundersøkingane. Deler av kritikken ligg utanføre det toktleiar har kontroll over, men noko kan det gjerast noko med.

Det var veldig god tilbakemelding på feltassistentane og på hardbunns-studiet i strandsona. Dette betyr at vi har dyktige feltassistentar og at delegeringa av den praktiske opplæringa på våtlaboratoriet fungerer som ønska.

Tiltak:

- 1) Betre gjennomgang av all operasjon av reiskap gjerast grundig før og under fyrste prøvetaking av kvar reiskap.
- 2) Betre gjennomgang/vere tydelegare om logistikk rundt «det å planlegge og gjennomføre ei feltundersøking/tokt» og at det normalt skjer uforutsette hendingar
- 3) Meir tydeleg på «kommandolinjene om bord» og kva ansvar ulike deltakarar har
- 4) Klargjering av blautbotnundersøkingane

Course evaluation: BIO331 Fisheries management, spring 2014 (5 credits)

The overall setup of the course was similar as in 2013: 13 lectures, an obligatory assignment, and oral exam. The assignment is a simulation exercise implemented in Excel, with a simple report. 10 lectures were given by me, and there were 3 "guest" lectures (Fabian Zimmermann, Jeppe Kolding, and Jennifer Devine). The lectures have been constantly improved and updated, and I am generally satisfied with the contents. Students get the lecture notes after the lectures, and the exam is largely based on these. In addition, there is a list of articles that also belong to the pensum (11 articles this year).

Perceived problems before the course

The course is very lecture oriented, with me standing and talking by the video screen most of time. I have tried to include more discussions and active use of whiteboard, but these are just minor fixes. I addressed this challenge by introducing a candy fish experiment (I have run two such experiments as part of teaching before, as well as the "field" experiment published in ICES JMS, but not during this course).

Candy fish experiment

A new element this year was a candy fish experiment. The students were divided in three groups: managers, conservationists, and fishermen. The managers had the ultimate responsibility of setting quotas, based on scientific advice as well as pressure from the fishermen and conservationists. The lecturer was the scientist providing advice, but only advice solicited by the managers (or other players). The fish population would renew according to a rule, unknown to the participants. Nothing else than the precise stock estimates of two types of fish was known to the students. The task was to manage and utilize a previously unused resource. The students were asked to act upon the given role, without further instructions. The aim of the exercise was to illustrate various perspectives to resource management problems, difficulties imposed by limited knowledge, and the interplay between different players. I hoped that they would utilize the knowledge gained during the course, as well as the methods course that was running at the same time.

In the beginning of each lecture, I presented the population status. The students then discussed within groups about their next recommendation (conservationists, fishermen) or the quota. The final quota was decided by the managers but also reflected the input from the others. My original plan was that this would take 15 minutes in total but because the students engaged in lively discussions, both within groups and in plenum, the exercise usually took longer, sometimes nearly half an hour.

The details of the system were revealed in the last lecture, e.g. the true theoretical MSY per population and the fact that they were in competitive interaction.

Participation and results

This year 13 students participated in the course and returned the assignment. Attendance to lectures was satisfactory, probably around eight students typically. 10 students took the exam in spring and 1 student took it in autumn. 10 students successfully completed the course. Two students totally disappeared without giving any explanation.

Exam results:

A: 2	D: 1
B: 3	E: 1
C: 3	F: 1

Student evaluation

Five students returned the evaluation form (appendices). All rated the course as "quite good" (i.e. between "average" and "very good") and considered the workload adequate. The course was obligatory for those who answered.

One student thought that the contents were too focused on Europe. The student also highlighted that guest lectures were good and that more of those could be included.

Two students were asking for better information about how the exam is like. These students were also wanted more discussions on academic papers and their better integration to the course. Three students claimed to have read all the syllabus articles whereas one skipped some of them and one read nothing.

Two students rated the candy fish exercise as "very good", two as "quite good", and one as "average". Two students described their perceived learning outcome. I also specifically asked for suggestions for improvements, and these mostly related to changing the roles different players had.

Successes and problems

Candy fishery

During the course, I got an impression that the students liked the candy fish experiment very much, and it was very active part of the lecture. Also the student evaluations were quite positive. The actual learning outcome is difficult to judge but based on just two evaluations it looks OK.

One of the red threads in my lectures is that successful management requires explicit objectives, but to my disappointed the managers never defined what the objectives of the candy fishery were. Perhaps the lecturer should take a more active role, also offering unsolicited advice.

The main problem with the experiment tried this time was the asymmetric roles of the different groups: managers had the final say, and particularly conservationists had little influence. Somehow more even roles should be devised.

The system was deterministic, apart from rare mistakes in counting the candy. At least a little bit of noise should be included. On the other hand, if there is too much noise, students cannot hope to learn much of the system during the relatively few lecture times. Fishermen could be encouraged to cheat a little.

The current setup with three student groups does not work if there are fewer people than this year (as has happened many years).

The experiment took more time than planned. This lead to several lectures going overtime.

I recommend keeping the candy fish exercise, with some improvements to the setup.

Other

The students differ very much in their skills and motivation. This makes it challenging to run a course that is satisfactory for the majority.

The reading list should perhaps be pruned, with the remaining papers better integrated to the lectures.

The students should probably be engaged more when discussing feedback from the assignment. Perhaps they should discuss the answers in pairs and present the answers to the class? This could even replace the current written report delivery. The timing of the assignment has been a bit haphazard; ideally it should be given quite early, and time be set aside for discussing the results (this was missing this year, partly because the candy fishery took so much time).

Although the candy fish exercise is a step in right direction, more student activity towards lectures would still be good.

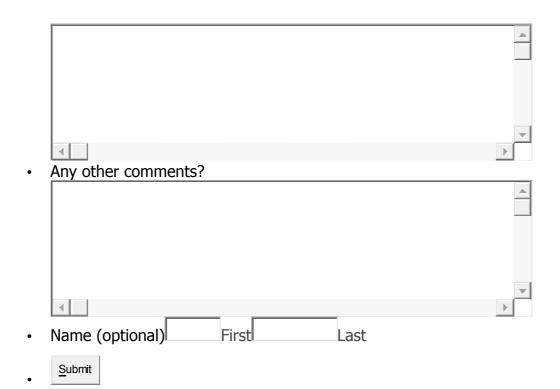
Mikko Heino

Appendix I. The feedback form (https://skjemaker.app.uib.no/view.php?id=519264)

Fisheries management (BIO331) feedback

Thank you for your attendance! I would like to know how you liked the course in order to improve it the next time. The survey is anonymous unless you decide otherwise.

•	What is your overall impression on the course?
	○ Very good ○ Quite good ○ Average ○ Quite bad ○ Very bad
•	Did the course meet your prior expectations?
•	Was this course obligatory for you?
	□ Yes
•	Was the workload adequate relative to the credits received (5 sp.)?
•	Was the "obligatory reading" list (syllabus, 11 articles etc.) too long?
•	Yes, too long No, just about right Did you read the material in the "obligatory reading" list?
	Yes, I read all of them Yes, I read most of them Yes, I read some of them
•	No, I skipped them Did you read the material in the "further reading" list?
	Yes, I read all of them Yes, I read most of them Yes, I read some of them
	No, I skipped them Was there something missing or that should have been covered better? Something
•	too much?
	▼
	T
•	How did you like the candy fish exercise?
	○ Very good ○ Quite good ○ Average ○ Quite bad ○ Very bad
•	What do you think that you learned from the candy fish exercise?
	▼
	Do you have any suggestions on how to improve the candy fish exercise?
	be you have any suggestions on how to improve the candy him exercise:



Appendix II. Student feedback

What is your overall impression on the course?	Quite good
Did the course meet your prior expectations?	partially more or less, overall yes
Was this course obligatory for you?	- Yes
Was the workload adequate relative to the credits received (5 sp.)?	yes
Was the "obligatory reading" list (syllabus, 11 articles etc.) too long?	No, just about right
Did you read the material in the "obligatory reading" list?	Yes, I read all of them
Did you read the material in the "further reading" list?	No, I skipped them
How did you like the candy fish exercise?	Average
Do you have any suggestions on how to improve the candy fish exercise?	A more realistic and appropriate of stakeholders, maybe an introduction to the realistic might-relations. (Do the conservationists really have something to say? Can the fishermen do what they want, or is it realistic to be caught?)
Any other comments?	As i already mentioned, a discussion of the papers in class would be nice, a better Integration of the Topics of the papers, so it makes it easier to read and understand them during preparation.

What is your overall impression on the course?	Quite good
Did the course meet your prior expectations?	Yes
Was this course obligatory for you?	- Yes
Was the workload adequate relative to the credits received (5 sp.)?	Yes
Was the "obligatory reading" list (syllabus, 11 articles etc.) too long?	No, just about right
Did you read the material in the "obligatory reading" list?	Yes, I read all of them
Did you read the material in the "further reading" list?	Yes, I read some of them
Was there something missing or that should have been covered better? Something too much?	Felt at times the material focused too heavily on European fisheries. Would be nice to have a more broader scope, with perhaps some more 'guest' lectures (in the style of the deep sea or small scale fishery) to broaden the scope somewhat.
How did you like the candy fish	Quite good
exercise?	Quite good
what do you think that you learned from the candy fish exercise?	A good framework from comparing what was covered in lectures to how it applies it a "real" fishery. Highlighted the lack of information available when a fishery starts, and that it isn't really a surprise that resources can become overexploited.
What do you think that you learned	A good framework from comparing what was covered in lectures to how it applies it a "real" fishery. Highlighted the lack of information available when a fishery starts, and that it isn't really a surprise that resources can become

It would be nice to know beforehand more detail of what form the exam will take. There was a lot of detail covered in the lectures and in the lecture slides. For the exam, however, it felt like only an overview of the details was needed and what was more important was an understanding of the key principles. This impression should be made clear to the students before the exam, as it will help to focus revision efforts.

For a Masters course, I feel more weight should be given to the critical reading of academic papers. One idea would be to shorten the time given to the lecturer to presenting. For example, academic papers on the next topic to be covered in the following lecture could be assigned to read at the end of every class. The following week the first 45mins could be the lecturer presenting the key principles of the topic. Following this, a student (who volunteered at the end of the class in the previous week) could take the floor and briefly (20 - 30mins or so) present a paper on the topic to the class. Following this, a discussion (led by the lecturer) could taken place where the students express their opinions on the topic of the paper, as well as the paper's writing style, methods etc.

What is your overall impression on the course?	Quite good
Did the course meet your prior expectations?	yeah. it was very informing
Was this course obligatory for you?	- Yes
Was the workload adequate relative to the credits received (5 sp.)?	Yes
Was the "obligatory reading" list (syllabus, 11 articles etc.) too long?	Yes, too long
Did you read the material in the "obligatory reading" list?	Yes, I read all of them
Did you read the material in the "further reading" list?	Yes, I read some of them
How did you like the candy fish exercise?	Very good
What do you think that you learned from the candy fish exercise?	I learnt that management is not as easy as often thought. with the various stakeholders having varying interests, its difficult to effectively manage since the definition of the effectiveness is even subjective and relative. it also informed me that sometimes managers have no idea what they are doing. Ones a stakeholder is able to press and lobby, they often end up being those whose objectives are adhered to by the managers.
Do you have any suggestions on how to improve the candy fish exercise?	The candy fish exercise can be made to reflect real life management a bit more by allowing managers time to listen to arguments from the stakeholders. The scientists should also be given the opportunity to express their views as way of informing management decisions. Maybe in the future, the scientific group should also be students (supported by lecturer) who could speak out openly to the managers about the risk involved in some of the manager actions.
Any other comments?	Very interesting class. Perhaps next time the nature of the exam should be communicated to the students prior to the exams. With so much to read its good if you have an idea how its going to be.

What is your overall impression on the course?	Quite good
Did the course meet your prior expectations?	yes
Was this course obligatory for you?	- Yes
Was the workload adequate relative to the credits received (5 sp.)?	yes
Was the "obligatory reading" list (syllabus, 11 articles etc.) too long?	Yes, too long
Did you read the material in the "obligatory reading" list?	Yes, I read most of them
Did you read the material in the "further reading" list?	Yes, I read some of them
Was there something missing or that should have been covered better? Something too much?	it was ok
How did you like the candy fish exercise?	Quite good

What is your overall impression on the course?	Quite good
Did the course meet your prior expectations?	yes
Was this course obligatory for you?	- Yes
Was the workload adequate relative to the credits received (5 sp.)?	yes
Was the "obligatory reading" list (syllabus, 11 articles etc.) too long?	No, just about right
Did you read the material in the "obligatory reading" list?	Yes, I read most of them
Did you read the material in the "further reading" list?	No, I skipped them
How did you like the candy fish exercise?	Very good
Do you have any suggestions on how to improve the candy fish exercise?	Make the fishermen do the fishing it creates some risk. The managers will always take out the right amount but maybe have a rule that they can only take 2 more or less then what the managers set. Also if there is any way to put in some environmental varriability that to would increase the risk, but I can imagine with such small numbers it would be hard. Maybe you could have two groups of fishermen to but the class is very small. I also feel like there should be an assignment or report to go along with the candy fisheries.

BIO333 - emnerapport 2014 vår

Faglærers vurdering av gjennomføring

Praktisk gjennomføring

Den praktiske gjennomføringen gikk greit, med unntak fra noen problemer med AV systemet på tildelt rom K4, som ble løst ved å skifte rom på to forelesningsbolker. Kurset er intensivt og går over to uker, alle dager mandag – torsdag, slik at tilreisende fra Oslo, Tromsø, eller utland kan følge kurset. En tilreisende deltaker i år, fra DTU Aqua, Danmark. 15 studenter fulgte kurset, 11 tok eksamen.

Strykprosent og frafall

15 studenter fulgte kurset, 14 oppmeldt, 11 møtte, 1 støk. 1 student fikk ta muntig eksamen fra Danmark over skype. Et rom på Universitetet der, samt et rom på UIB ble avsatt, med egen vakt på begge steder. Vi fikk god erfaring med dette, og eksamen gikk fint for studenten.

Karakterfordeling

Karakterskala A-F, muntlig eksamen.

Studieinformasjon og dokumentasjon

Se meldinger på nett. Alle forelesninger gitt som tavleundervisning på whiteboard, men utgitt som powerpoint filer. Nødvendig demonstrasjons-programmer = Simrad ER60 for kjøring av ekkolodd og LSSS etterprosesserings-system ble gitt som lisenser på rommets IP adresse under kurset.

Alt kursmateriell kopiert til alle på hver sin 16 GB minnepenn, tidligere CD, utdelt i klasserom.

Tilgang til relevant litteratur: Bok + utdelt masse relevant litteratur på minnepenn.

Faglærers vurdering av rammevilkårene

Lokaler og undervisningsutstyr

Forelesningene ble gitt på rom K4 UIB.

Andre forhold

Programvare for ekkolodd, samt demonstrasjonsfiler for oppløste mål Torsk fra Lofoten, og stimende fisk (multiple mål) , sild fra Ofotfjord og bandingsforhold med artsidentifisering fra Nordsjøen.

Faglærers kommentar til student-evalueringen(e)

Metode - gjennomføring

Ingen studentevaluerting ble gjennomført i 2014, men anbefales gjennomført på neste kurs, i 2015.

Oppsummering av innspill

Tilbakemeldingene fra studenter under kurset har vært positive.

Ev. underveistiltak

Faglærers samlede vurdering, inkl. forslag til forbedringstiltak

Bra gjennomført emne. Litt lite undervisningrom i K4 med 15 studenter. Flere av studentene vil bruke akustikk i sine MS og PhD oppgaver senere. De fleste hadde allerede valgt oppgave.