<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
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<tbody>
<tr>
<td>User Interface Programming 1</td>
<td>1MD002</td>
</tr>
<tr>
<td>Term</td>
<td>Year</td>
</tr>
<tr>
<td>Spring</td>
<td>2008</td>
</tr>
<tr>
<td>Number of registered students</td>
<td>Number of students passed</td>
</tr>
<tr>
<td>52/49 attended</td>
<td>47?</td>
</tr>
</tbody>
</table>

**Started with last year’s eval + actions taken (y/n)**

Y

**Mid-course evaluation (y/n)**

Y

**Comments on number of students passed and evaluation answers**

Overall the course went as planned. The student’s result was acceptable.

Most students and groups work fine. It is rare to have serious problems within groups. Two late dropouts – because of overload from other classes I suspect. One registered by error and not removed in time.

In one/two groups there were some minor issues, due to too large difference in programming skills and language difficulties. The lower-performing students in such groups were left with reading and looking at the other’s code (their solution, not mine). The result is that they do not learn enough themselves. As teacher, you tend to discover this a bit too late if the group itself does not take action in time.

The question “Did you at the start of the course receive information about previous course evaluations and measures taken because of them?” got almost a 50-50 answer distribution! It shows you cannot ask this question on a course evaluation. The information was given at the first lecture and is also available online on the course web, in the lecture notes.

The style of the course (lots of manual work, group work, different initial Java skills, students are given a lot of responsibility for their own study pace and level, seminar-like discussions on code design and strategies) does not suit all. This should be communicated better (I would say it is already communicated, but maybe not clear enough or received correctly) so that not the wrong expectations do not arise.

**Responsible teacher**

Erik Borälv

**Other teachers**

No

**Teaching**

<table>
<thead>
<tr>
<th>Lectures</th>
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<tbody>
<tr>
<td>Lessons</td>
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<tr>
<td>Labs</td>
<td>0</td>
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<tr>
<td>---------------</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Project</td>
<td>2 easy assignments, 2 hard</td>
</tr>
<tr>
<td>Exkursions</td>
<td>0</td>
</tr>
<tr>
<td>Individual tutoring</td>
<td>Yes, and via email</td>
</tr>
<tr>
<td>Other</td>
<td>Weekly group meetings, 7 x 45 minutes/group (4 students/group)</td>
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**Examination**

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<table>
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<tr>
<td>Written exam</td>
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<tr>
<td>Exam at home</td>
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<tr>
<td>Lab report</td>
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<td>Assignments</td>
<td>4</td>
</tr>
<tr>
<td>Report</td>
<td>0</td>
</tr>
<tr>
<td>Presentation</td>
<td>A little, at group meetings</td>
</tr>
</tbody>
</table>

**Major changes done before the present course**

No.

**Identified or planned changes for the next course event**

The setup with the students implementing an mp3 player is fun (they think) and valid from a course point of view. It has been used a number of years now though, and maybe it is time to find another overall project. Doing a simple game (like Tetris) could also work.

**Teachers’ comments (on e.g. student’s prerequisites, own and student’s effort, course planning, administration, examination, attendance, communication with students, tools used)**

The Java/OOP level before the course was more varied than previous years. It is (of course) easier to do a course if most are at the same level. Assignment 1&2 were designed to allow for time to catch up, for those that need so. It is however a point that not everyone understands or are serious enough about.

I used the Student Portal for reporting progress and assignment feedback (in file area). Seemed to work fine; no complaints.

A class of 49 students is a lot of work. Code review is hard: maybe relaxing the rules could be possible, but will not improve quality.

It took forever before the initial course administration was over and done; late registrations and winter vacations are a real problem. I don’t know how many students will attend the course before the first lecture – this makes any real planning impossible. One student was registered the last week!
The amount of work varies a lot, but is (also) a reflection of different skill levels and ambition. See table below. For 5 hp a lot is required, and some think it is too much. The hours spent on the course (extracted from individual diaries) does not really support the view that the course is hard or difficult. Average value was 73 h/student.
WELCOME!

In order to improve on the education we need feedback on courses. Please make sure you answer all of the questions. Text comments are appreciated but not required.

Don't forget to click on "Submit Evaluation" when the form is complete. Your answers are anonymous.

[Du får gärna svara på svenska ifall du vill.]

QUESTIONS

What is your overall opinion about the course?

<table>
<thead>
<tr>
<th>Svarsalternativ</th>
<th>Graf (%)</th>
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<td>1 ( = bad)</td>
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<tr>
<td>5 ( = good)</td>
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<td>13</td>
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Medelvärde: 3.88
Standardavvikelse: 0.91

What in this course has been particularly good?

- UI has given me a opportunity to work as a good team player in a course project. And because it's based on self-studying and team work, it makes me more efficient than before. ¹
- Det praktiska upplägget, från början till slut. ²
- It is a very practical course, I learned a lot about coding, that's very good. ³
- everything has been good in this course. You learn not only from the teacher but or you group but also from other group. ⁴
• Man lär sig mycket när man jobbar i grupper
• selfstudy then apply what we learned into implementation.
• * It was nice to work on a project. * I finally managed to discover som fun in Java
• no written exam
• IT good to work on a project
• Jag har lärt mig att programmera i java väldigt mycket mer än vad jag kunde innan.
• It improves my self-learning ability.
• I like the project part of the course
• Att man verkligen får göra något konkret. Att det hela byggs upp som ett projekt. Mycket bra att ha en uppsamlingsassigment där man får tid att göra om och fixa till sin kod och inte bara fokusera på bya grejer.
• The course related to practice assignment. The tutorials that teacher gives us, really gave a lot of help. The form of discussion give us a chance to share our opinion.
• Jag tyckte ämnet var väldigt roligt. Det projektbaserade sättet att jobba gjorde att jag lärde mig massor.
• Att man måste leta information själv och fått jobba lite för att lära sig java mer...
• no writen exam
• learning by doing, improved java skills. improved communication skills, learn how the team works
• The main project was fun.
• I've learnt a lot concerning how to use the JavaSwing to make a user-interface design. And the group meeting also provides a good chance to me to learn from other groups each week
• The project idea was fun to work with and keep me motivated throughout the course
• That it's based on actual work with a project. Much better learning.
• I learned a lot of swing and java programming.
• The course gave me a lot of pressure, and made me getting ahead very quickly
• We have more chances to discuss with teacher and partners.
• The level of this course is high, which is a good thing. Not do we only learn how to programm GUI's, but we also learn how to do this properly. Ofcourse this is forced by the teacher that has good knowledge.
• Upplägget med tvåveckors-deadlines och veckovis handledning känns väldigt naturligt och effektivt. Att hela tiden bygga vidare på det man gjort tidigare var också bra.
• Good practical course to learn much programming skills
• Getting to know some java tricks
• Exercise, Lectures
• Bra assignments, vi har gjort saker som är lite roligare. Man får göra ett riktigt program som verligen kan användas.
• Learning how to design a GUI and how it works.
• The assignment in general was both fun and rewarding! Great new knowledge, fun programming.
• It's divided into four assignments.It's particularly good.
• The teacher is very good at OOP and GUI design, and does try to teach best practices :-)
● The amount of learned skills. 42
● It has been fun working with GUI designs. 43
● We learned a lot! 44
● Having the opportunity to work in a group. 45
● The freedom 47
● Man lär sig mycket java, och en hel del standard-funktioner som brukar finnas i program. 48

How could the course be improved?

● I think it should provide more lectures instead of all are supported by group meeting. 1
● Det hade underlättat att redan från början fått veta vilka delar som skulle implementerats. När man bara får reda på lite i taget så bygger man på sitt program i lager efter lager, och koden blir bara rörigare. Vet man vad som ska finnas från start så är det lättare att strukturera upp sin kod från första början. 2
● It's good enough. 3
● More lecture from the teacher can be nice. 4
● Nån mer föreläsning kanske 5
● Assignment 3 should be less work but assignment 2 could be more 6
● * Individual assignments * Lectures in design patterns (so that I don't need to sweep the Internet for everything) * The teacher must come to the students and not the opposite. * Reading instructions for relevant books so that I don't need to be so dependent upon the teacher. * The teacher must become better at conveying his knowledge. If this can't be done because the assignments becomes to easy, the nature of the those needs to be changed. 7
● Make more assignment so the work load is less 9
● Assignmentsen borde vara uppdelade lite bättre så att det är ungefär lika stor arbetsbörda på alla. 10
● Maybe for the novices, some lectures could be more helpful. 11
● The actual java and gui-part was n't really covered in the course, the way my group learnt stuff was to google it. That's not really great, it's better to be taught things in lectures. 12
● Bättre fördelning av uppgifterna. Assignment 1 var jättelätt, tvåan lätt sen blev det ett jättehopp till 3:an och sen eftersom man läser massa andra kurser blev det fullt upp till 4:an. 13
● Någon / några lektioner eller fler föreläsningar på de svårare momenten vore bra 19
● no need to improve 20
● more good examples. more materials 22
● More lectures. 23
● Nothing. it's good. 24
● Make all the assignments available at the beginning since ass. 1 and 2 was rather low workload and 3+4 was very high. 25
● There should be more credits for this course. 5 credits is too little! It's worth much more than that. 28
● Maybe we should do a little less in assignment 3. 29
● The course could be improved if there is also focus on how to design the software structure of the player. 30
● Det skulle ev. kunna vara bra med några extra tillfällen under kursens gång där man kan

- Bätre uppgifts beskrivning. Få kända buggar förklarade tidigare. Alla deadlines för uppgifterna från början.

- more lectures to make the balances among different skills of levels

- Given more freedom when developing there were situations where I think it was just a matter of people way to develop than real things to apply. Course should be designed to use the GUI out ther (NetBean, etc) since it will speed up the development effort. Making some kind of course program to give good java knowledge but still using the GUI interfases... since they are the ones to be used when working in the industry.

- I am happy with the way the course has been.

- More lectures, and teacher-held labs.

- Maybe should more lectures

- For Gods sake make it a 7.5 hp course!! For me it really sucks with 5hp, you don't have time to learn the material deep enough, and it involves switching between 3 instead of 2 courses all the time, and each context switch takes 50 minutes for my brain --> less efficiency. I don't like the "Civilingenjörs" way with many shallow courses, that way you get no particularly good at many things, instead of really good at few things. Deep learning is better. I only like 7.5, 10 or 15 hp courses.

- Maybe some more lectures.

- More help from teachers or lab periods on schedule where you could have a lab assistant

- To my opinion it would be improved by making an atmosphere so that there would be ok not to know something. In such an atmosphere people will help each other learning instead of competing.
The total amount of work on the course, in relation to the credits, was ...

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<tr>
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<th>Graf (%)</th>
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</tr>
<tr>
<td>5 (= high)</td>
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</table>

Medelvärde: 3.94
Standardavvikelse: 1.02

Comments on the amount of work:

- We have worked together on Our Dplayer (mp3 player), although I have joined our group after the beginning, but I have really integrated into our team. I have worked on themes, looking and feel part, also provide a lot of suggestions on the processing of all the assignments. I just missed to update my diary sometimes. I still give a lot of effort on the assignments since I am doing my thesis work at Ericsson in Stockholm. Therefore, I think I should pass with 4. Thanks 1
- Every week I have to spend like around 10 hours on it. 3
- A lot of work. Not easy to do it in three weeks 4
- Dert är skit mycket jobba men det är kul jobb så 5
- We almost spent all of our period time in doing the assignments. 6
- I don't understand what's expected from me. 7
- Lot of work to do, specially for beginner programmer 9
- Alldeles för mycket arbete för de poäng som kuren faktiskt är värd. När man lägger ner 100 timmar så borde man få betydligt mycket mer poäng. 10
- I think the work worths at least 7.5 credits or more. 11
- Mycket tid måste läggas ner.. 13
- The work of assignment is very appropriate. I learned more comparing to other courses that is 7.5 credit. 16
- Assignmentsen tog MYCKET tid... 19
- over 100 working hours 20
- moderate and smooth 22
- It provides a good practical chance for us to learn 24
- It has taken me atleast a shitload of work... nuff said. 25
- It felt like the course had the same content as when it was worth 5 pre-bologna credits. 27
- The assignments need a lot of work. I spent so much time in them. I hope the work could be less or credits should be more. 28
- I think the assignment3 and 4 are harder,maybe this course should be valued 6.0hp. 29
- The amount of work is good. 30
- Upplägget med att ALLT jobb är grupp-baserat gör att det blir viss obalans mellan deltagarna i mängden arbete. I vår grupp var det väldigt stor skillnad i timmar nerlagda, dels pga varierande engagemang, men även dels pga varierande kunskapsnivå. Vår grupp hade rätt stora problem med kommunikationen vilket ledde till att vi arbetade mest var för sig utan någon egentlig arbetsfördelning. Inget problem som kanske beror så mycket på kursen som
på deltagarna i gruppen. En läxa man lärt sig till nästa gång helt enkelt.  
- Third assignment was pretty much a lot of things... too much effort in first assignment knowing that it wasn't evaluated. It needs to be pretty clear for the student taking the course that some development knowledge is a MUST otherwise work can very much be on some the group participants.  
- All in all it was ok. The second and third assignment could be in a better relationship reffering the effort  
- Det känns som man har lagt ner många timmar, eftersom nästan allt är eget arbete och det är programmering så kan det ibland ta lång tid, man får lägga ner massor av timmar på att lösa nåt problem, och visst man lär sig saker av det men ibland så blir det många timmar på onödiga saker.  
- I had a bad experience with our so called them. We had different levels of programming experience and I must add also a different level of ambition so all this has meant a lot work for me and no weekends.  
- Much work, though fun and rewarding.  
- I have X h logged on the project, this does not include context switch time from other courses, or half-related reading :-). X h is today a little more then 1/3 speed, since there is time left on the course according to the schedule. I would have loved to put over 200h of work on it :-) I would have liked 2-3 more lectures, if possible.  
- Fair. It's a really a very demanding Period. Given the other courses given are VERY time demanding and mandatory.  
- The course has taken up a lot of time and has made the other courses that we read at the same time suffer for it.  
- The course wanted to take way more time then it should in my opinion. Sure the diary notes our efficient work time and all, but it takes time to plan for meetings, gather up, wait for people etc. Add that to two other courses it becomes tricky and all the work doesn't really get recorded in the diary even if you write as often as you can. This course certainly felt like atleast 7.5HP thanks to all that.  
- Beror väldigt mycke på förkunskaper i java.
Did you at the start of the course receive information about previous course evaluations and measures taken because of them?

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<tr>
<td>yes</td>
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Did you get the opportunity during the course at a scheduled time to give anonymous written feedback on the ongoing course (in short: was there a mid-course evaluation)?

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<tr>
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<td>42</td>
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What is your overall opinion about the teacher(s) on the course?

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<tr>
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Medelvärde: 3.73
Standardavvikelse: 1.09

Comments on the teachers:

- I think we can discuss on more lecture format instead of all group meetings. Then that will be great.  
- I like the teacher, he is very good.  
- Good teacher with good method of working, specially the group meeting.  
- Lite otydlig ibland och mycket "search and you shall find"  
- Very responsible teacher  
- I am sorry to say that I find him rather arrogant. The seminars feels more like interrogations than discussions; a reply to a question is often met by a stare in the face accompanied by a sceptical grunting and a "Why do you think so?". It is often very hard to get a straight answer. A design question is often treated with a "it may be a good idea. It depends." If he's afraid of divulging to many details then the nature of the assignment has to be changed. I am not schooled in java's design patterns and that's why I take this course. It's paramount that you can have an open communication with the teacher so that he or she easily can pass on the knowledge. Furthermore, one's success in this course is heavily dependent upon the teacher since much of the information can't be retrieved from other sources. For example, I haven't been given any information about his grading, and even if I knew them it's quite hard to understand what he expects. Even if my application works great, it may be based on a bad design decision that only an experienced java programmer would find. I could have preempted all of the above problems by being more active, but it took some time before I understood that I had misjudged the situation. I expect the teacher to be more guiding, to actively communicate what is expected of oneself. Instead, all information had be pulled out with much effort. All in all, it's a pity that his communication skills are lacking because its
evident that he's skilled in the subject and has a lot of important things to say. Changing one's attitudes is a long and hard path (I know this from personal experience), but much can be gained in changing the structure of the course. How about making the assignments individual and having lectures in design patterns? Even a reading instruction for a book would suffice. 7
- Har varit lite för nedlåtande när man har frågat om hjälp och när man har frågat om den så har man inte riktigt fått några bra svar. 10
- Some requirements from the teachers is too detailed and might not need to be implemented as the request. 11
- Erik is a bit arrogant and rejective. The "grupphandledning"s was more of an interrogation then a chance to learn things, and if you didn't know the answer you would be told off. 12
- Han förklarade inte riktigt vad han ville att vi skulle göra. Ibland fick vi anmärkningar som vi inte förstod vad de betydde på vårt projekt och när vi frågade fick vi inget riktigt svar på vad han menade heller. Snabba rättningar var bra. 18
- Lite väl kort ibland och nedlåtande. 19
- i like his clear english 22
- Good 24
- Erik responds quickly to mails and often that answer the question in a good way. thumbs up! 25
- Erik is knowledgeable and nice. 27
- Maybe he can see the codes of ours in the group meeting and figure out the problem of them. 29
- Erik is a teacher with a good amount of knowledge. He is dedicated to his work and shows this too when he works with the students. In one way he is motivating others to work, which is a good thing when you are a teacher. 30
- Kunnig, seriös. Gillade att han hade en fast åsikt om vad som var "bäst" i ett annars ganska öppet ämne. Det gjorde det lättare att veta vad han förväntar sig av en. Stort plus för det. Har eg. inget negativt att säga, förutom kanske att han skrev väldigt slarvigt på whiteboarden. Ibland så att det var direkt omöjligt att se vad det stod. Han skrev iof så lite att det var enkelt att hänga med i vad han sa istället. 32
- good 34
- Always answer at the most 2 hours later... but usually, it was 20 minutes,... even early in the morning. 35
- good and fast quick help 36
- Bra på lektionerna och kunnig, men måste bli lite mer hjälpsam. 37
- Fast feedback to questions and very relaxed. 38
- Erik isn't very encouraging, and the feedback he gives doesn't help very much. He is also difficult to approach with questions. Change the teacher. 39
- As I wrote earlier: The teacher is very good at OOP and GUI design, and does try to teach best practices :-) ), which is highly appreciated. 41
- Knows he's subject very well, Open door policy = Very good. Overall I'm very happy with the teacher. Maybe a bit confronting. Personally I didn't mind. I know others did though. 42
- Could have helped more. 43
- Could maybe talk a little less in riddles at some times, but overall a good teacher. 44
- Har varit ganska mycket "my way or the high way". Vilket kan vara bra så att man lär sig rätt från början, men information och hjälp har nästan behövt dragits ur läraren. Och ofta har man fått en lätt nedlåtande respons när man har problem med något. 48
What is your opinion on the course material (home page, links, book, handouts, etc)?

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</tr>
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Medelvärde: 3.77  
Standardavvikelse: 0.97

Comments on the course material:

- Really good and useful for self-studying.
- I learned a lot from the course material provide by our teacher.
- Nja, altså man anväder juh javadoc typ
- very useful
- Initially I thought this would be a rather easy course, but I soon discovered that Swing was harder than I thought. You really had to follow a design pattern or everything would fall apart. Unfortunately, it was not until late in the course that I discovered this. Requests: Reading instructions in a nice book. More links.
- Vi hade ingen
- The links are very good.
- Man måste leta upp det mesta själv och det kan vara svårt ibland..
- De rekommenderade programmeringsverktygen var krångliga. Det finns så mycket bättre att använda som också är gratis. Erik kunde ha lagt upp mer av materialet han visade på seminarierna på hemsidan.
- Borde köpt boken känner jag nu i efterhand. Finns dock mkt på internet så det funkar ändå...
- online materials enough.
- The materials our teacher provided in the web is very useful to us.
- Too bad there was so little information on Drag and Drop.
- I think they are very helpful for us both to finish the assignments and learn the knowledges.
- No comments
- Ingen bok man behövde lägga pengar på = BRA! Google och internet är perfekt för ett sånt här ämne och det hade läran ten tagit fasta på och istället för bok gett oss bra länkar inför varje moment. Riktigt bra!
- quite useful
- Good links... not too much to ask since there is out there a lot of thing to look at.
- Well there was really no course material. Just links and homepage, which was enough.
- Only material available was the homepage and links from there. Average.
- Select links to material that follows the same guidlines that are given in class. Some was good, some bad.
• Good, a book suggestion was given, but links and so forth where nicely updated on the course homepage. 42
• Internet is good for java? dunno what else to say. 44
What do you think about the course framing (the way the course was planned and executed)?

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Medelvärde: 3.54
Standardavvikelse: 0.97

Comments on course framing:

- More lectures instead of meeting.
- No idea, but the one we have now is good.
- Kanske ska vara lite tydligare uppgifter, och eventuellt nån mer inlämning.
- I would have preferred individual assignment because that would make it easier to judge my performance. Sure, we have the diaries, but it's tedious to make notes in them and I don't think they're so good in measuring one's performance. One can put in a lot of hours but that doesn't mean that you've learnt anything.
- Borde ha fördelat uppgifterna lite bättre över alla assignments.
- No.
- Ojämn lastbalansering.
- none
- We often didn't know what was expected from us when we started with an assignment.
- Good!
- Make all the assignments availiable at the beginning since ass. 1 and 2 was rather low workload and 3+4 was very high.
- So much to do, so little time.
- The course is always pushing and pushing...
- I think we could have more time to do the assignments.
- It was good.. all groups got equally even attention!
- Som sagt, gillade upplägget med deadlines varannan månad och veckovis möten. Kunde kanske vara lite bra med något extra tillfälle för diskussioner utöver de specifika problem som berördes varje omgång.
- more lectures would be better
- It was good since I could acquire good knowledge in a language that I hardly used before.
- Ok. 4 assignments, works quite well. More guided labs would've good.
- Pretty ok
- Maybe little less on assignment 3.
- To big assignments.
- Maybe the start was a little slow compared to how the rest of the course. Didn't get access
to assignment 1 soon enough. 44

• Något fler föreläsningar på de stora delarna i kursen skulle nog ha underlättat en del. 48
What is your opinion on the course examination (written exam, home exam, assignments, seminars, reports, etc)?

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Medelvärde: 4.06
Standardavvikelse: 0.91

Comments on examination:

- It a really good chance to do like the requirements on the assignments in order to practice your ability on Java programming skills. I also think we should include some seminars, then we can more activity in the meeting.
- from this course i learn a lot about how to coding, how to find things from the internet to help me coding, etc.
- Älskar gruppmöttena, negativt kan vara för blyga personer
- Is this question applicable to this course? I don't like the assignments as stated previously. Furthermore, I have no idea about my grade since the teacher hasn't talked to us about that. You can visit him, but I haven't bothered to do so since I don't expect any straight answers nor do I have the energy to pull all information out from him.
- Lite för ostrukturerat
- If the final work is considered as the exam, I think the effort of the work is very important.
- It's very good to have a big project to work on, it's a big plus that it was an interesting project too.
- Detta är ett utmärkt sätt att examinera denna kurs
- Jag hoppas bara att det som räknas är vad man har presterat och inte hur många timmar man har lagt ner på kursen. I min grupp tog det vissa väldigt lång tid att göra väldigt lite medan jag själv verkligen löste problem på den tid jag la ner.
- Assignments och lektioner/seminarier är ett bra sätt att lära sig en sån här typ av kurs.
- not exam yet
- assignment 3 is a lot bit harsh.
- One large project makes it a lot easier to focus.
- I think this's a very good way to do practical experiment.
- Projects are nice. probably learn alot more this way than i would have on an exminated cours.
- No written exam: lower stress. Continuous work gives a better learning.
- The assignments were fun and I learned a lot from them.
- The assignments instead of the written exam is a good idea.
- The examination is good I think. It is individually based.
- Bra att inte ha tenta. Tenta i programmering blir alltid så konstigt. Helt rätt ämne att bedömma betyg på den instats som gjorts under kursens gång. De kompletteringsuppgifter
som delats ut då man missat ett handledningstillfälle är lagom tunga, men kanske aningen vagt formulera. Man fick chansa lite i hur djupt man gick. 32
- Sometime the group meeting wasn't of great source of information and I don't see it fear having to write that much for a report when missing a meeting. 35
- Roliga assignments men kanske svårt att se vem som har jobbat mest osv. på varje assignment. Svårt att betygsätta 37
- Good procedure. 39
- Almost good. I worked my butt of, to learn new stuff. Since I did not know anything in the subject, except some java :-) I really wanted that highest grade, but since I did not know the grading criteria, I might not reach it. 41
- No exam, gotta love it. 44