

Evaluation Report  
**Knowledge based Entrepreneurship**  
Course 42435, Autumn 2008 (E08)

June 19, 2009

**Context**

DTU has provided a graduate course on applied entrepreneurship to master students since 1993. Hence this course is number 16 in a row, and the number of students, who passed it, over the years, is now passing 1.100.

The e'ship course is a practical and hands-on approach to opportunity-driven creativity, business modeling and business planning.

Students are divided into groups of 3-6 participants. The groups generate own product- or service ideas, analyze the market, contact customers, develop start-up strategies and plan the execution of the venture. Assistant teachers and coaches are available throughout the course.

At the end of the course, the students present realistic business start-up concepts at the exam.

**Course specifications**

13 lectures x 3 hours from September 2007 to December 2007

Themes: Applied entrepreneurship, opportunity-driven creativity, start-up strategies, business planning, market research & analysis, sales & marketing, management, budgeting & cash flow projection, financing, business law, patenting & licensing (IPR), cases.

Number of students:	Class size 2008: <b>106</b> . 94 passed, 4 failed. ( no-shows. Class size 2007: 67. 56 passed in 2007, 70 passed in 2006
Number of groups	<b>21</b> groups. 15 groups in 2007, 19 groups in 2006.
Average grade:	<b>8,1</b> . Dev. 3,4. 2007-class: av. 9.0. Dev. = 2.5,
Workload	5 ECTS = 125 hours. With 98 students, app. 12.250 hours have been invested in business creation and -planning at course 42435, 2008. (2007 class: 7.000 hours)

Evaluation, per group/student:

10 minutes presentation of business plan  
5 minutes individual presentation of personal theme  
5 minutes discussion and feedback  
4 minutes evaluation

Teacher:	John Heebøll, cernter manager, e'ship, DTU Management
External censor	Kristian Philipsen, associate professor, Syddansk Universitet, Kolding
Coaches	Alex Farcet (consultant), Dorte Wiene (management consultant) and master students from Copenhagen Business School: Hjalte Højsgaard Jacob Winter, Maxwell Veyhe, marte Hofset, Nicolai Lønne, Stefan K. M.

**Course evaluation principles and results**

Students are encouraged to evaluate the course, late October after 9-10 lectures. A digital questionnaire is available at the intranet (CampusNet). 52 students complied. (34 in 2007, 30 in 2006). A graphical summary is presented next page.

Further, the teacher is evaluated. In average the feedback is encouraging though a drop in performance from 2007 to 2008 needs some consideration.

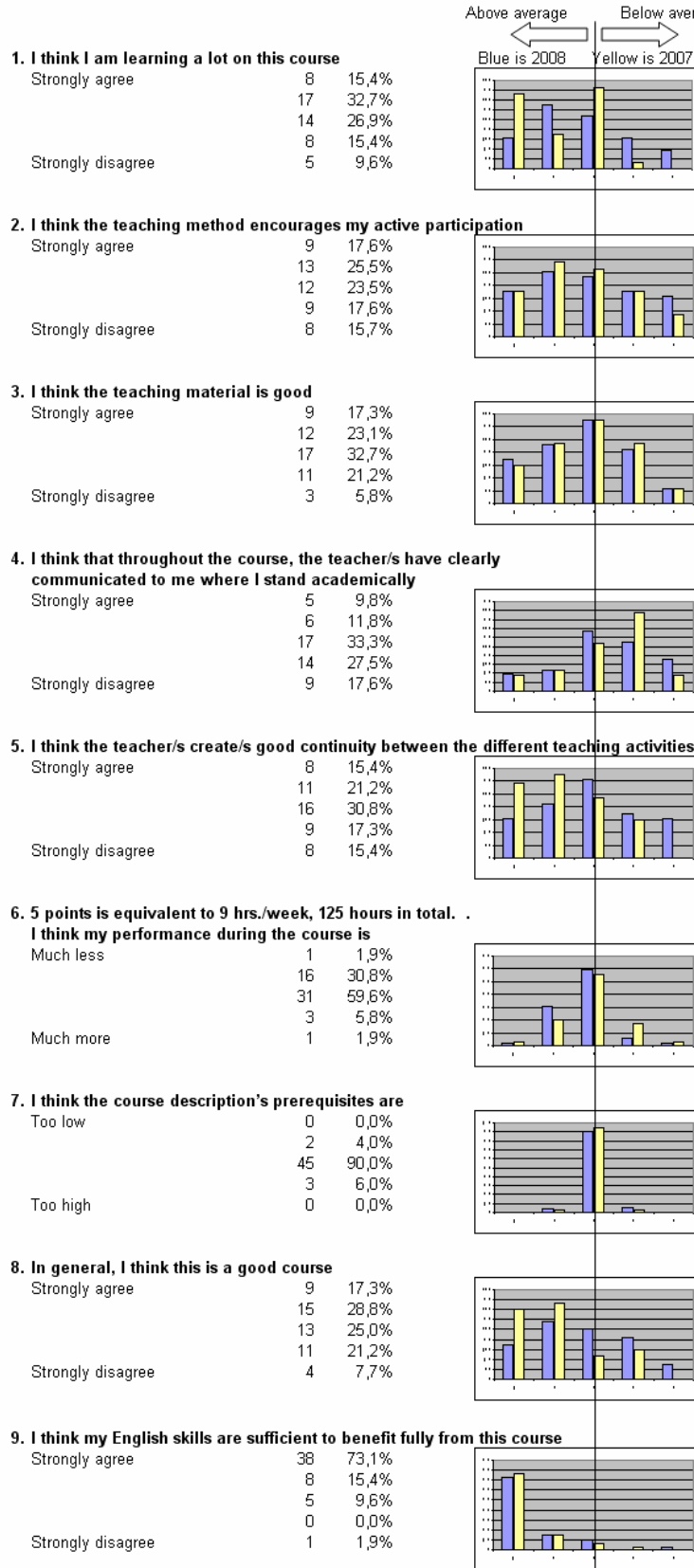
# Course evaluation

## 42435 Knowledge based Entrepreneurship E07

### Course/students statistics

106 could answer this evaluation form (71)  
 52 have answered this evaluation form (34)  
 2 did not follow the course (2)  
 50% answered (48%)

91 passed exam out of 106 enlisted (56 out of 67)  
 15 no shows (11)  
 4 failed (0)  
 57% answers compared to students at exams (61)



### Comments to the evaluation

1. The 2008 course differs from earlier courses by size. All figures are record breaking. The high number of students impacts the course in several ways:
  - a. Personal coaching is out of the question
  - b. Course administration is stressed to the limit.
  - c. The distance between teacher and audience is far.
  - d. Exams is industrialized.
2. The 2008 course also differs from earlier courses by being mandatory for certain students. The size of this group is not known, but clearly, students that are not there for interest and motivation add little to the general enthusiasm and the good spirit of lectures and group work.
3. In general, all key figures have decreased a bit from 2007 to 2008. Reasons are not fully understood. To add to this mystery, since the 2008 course was concluded, another graduate course at Copenhagen University and a Ph.D course at DTU have been concluded without this drop in evaluations. These classes were small compared to the DTU E08 class, so maybe size accounts for some of the explanation.
4. The teaching language is English, and this is now fully implemented throughout the course. Consequently, the course attracts a high number of international students: between 20 and 25%.
5. Most students find that they learn a lot on this course. Probably indicating that we cannot include more information or themes in this 5 ECTS course.
6. Likewise, a high proportion of participants find that the teaching methods encourage their active participation. This course calls students via e-mail, the day before each lecture, summarizing the agenda, proposing pre-readings and suggesting progress of the mandatory business plan. Hence, group work and preparing for lectures is made easy.
7. A majority finds that their academic standpoint during the course has not been communicated to them. This is a fair statement. We don't do individual evaluations on the fly.
8. A little more than half of the students find the teaching material acceptable - to good. The introduction of a new textbook thus does not impact evaluation in the same way as at the Copenhagen University 2009 e'ship class.
9. The workload seems to match this 5 ECTS course, meaning that in average, each student spends about 125 hours altogether on this course. 2008 figures indicate a shift towards a higher workload, though.
10. Everybody seems to agree, that the prerequisites required for signing up to this course are OK as they are. Actually we require very few preconditions, and we are quite liberal in accepting deviations, since this is a generic course picking up the participants from square one.
11. Approximately 71% of the respondents agree that this is a good course. Though this is an acceptable level, it is less than 2007 and earlier classes. We need to dig into this to keep the level.
12. The teacher's own observations::
  - a. The most cost-efficient e'ship course at DTU since 1992 – but this seems to be at a price.

- b. The students seem to run into a work overload situation, sometime between end October to late November, resulting in a massive no-show at lectures, creating sometimes a quite embarrassing situation when external lecturers are visiting us with only few students in the lecture room.
- c. The students did not adapt easily to the new regulations on individual assessment, in spite of quite comprehensive information throughout the course. Individual grades given at exam, were received in anger and little acceptance if below group average.
- d. The McKinsey business plan competition is quite an asset, creating a competition between the project groups that catches most of the students.

### **Comments received from the students:**

#### ***I appreciate:***

- This was exciting and enriching course (gave some insights into area not known before).
- The lectures were interesting and the textbook is very good conspectus to remind the material of the lecture.

#### ***I criticize:***

- The whole idea generation and business planning was kind of hard. Lots of degrees of freedom and lots of uncertainty.
- Long and boring lectures on a Friday afternoon! This kills me.

#### ***I suggest:***

- I think there should have been more budgeting and a little less of external lectors.
- Move the course from the auditorium and into a class room
- We start to learn how to make an ACTUAL business plan way too late.
- More content, less talk, shorter lectures, DTU coaches after lectures
- Relate contents to the business plan project.
- Serious deadlines midway.
- Mandatory assignments that count 20% in the individual marks

### **Course development**

Following is subject to change from 2008:

1. Shorter lectures – more time for group work in scheduled sessions with assistant teachers at hand,
2. Assignments – homework (mostly like specific business problems related to a start-up situation) should be developed,
3. A change in didactics (like part of the grade depending on individual assignments) to attract more students to lectures, mid to late in the course.
4. DTU should consider expanding teaching capacity within entrepreneurship. Classes exceeding 100 students challenge quality, administration and teacher to the limit.



John Heebøll  
DTU Management Engineering