

## Course Assessments

CS100 - Introduction to the Profession Course Manager - Bauer, M  
(most recent semester first, **recommendations in red, changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

**Update Course Goals - Computer networks should be added to the list of goals.**

- **investigate new book (or no book) - A textbook should definitely be used. It can help students and particularly ones without prior knowledge. The book we used last semester has a very good organization and is accompanied by a set of powerpoint slides.**
- **make more interesting, more hands on work, bring in professionals - Possibly, the labs could be made more difficult.**
- **opportunity for depth in some topics, challenge for advanced students vs. not to fast for average student**
- **This course should provide a broad overview without diving too much into any topic. In any event, almost all of the technical topics of the course are covered in depth in subsequent courses. The problem of having two kinds of students: with and without prior knowledge is a difficult one. Inherently, if the course is to meet its objectives in terms covering the list of topics as stated in the goals at a basic level (such as the one in the textbook we use) it may not be very interesting to students with advanced knowledge.**

Fall 03 Sections - **CS100-001 & 003** Instructor(s) - **Hood/Agam**

Student Count=**40** Assessment Count=**34**

Did you understand what was expected of you in the course? Y=**97%** N=**3%**

Do you think that you achieved the course goals for the course? Y=**91%** N=**9%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**62%** N=**3%**  
N/A=**35%**

What did you like best about this course?

**range of topics(4); easy and fun(9); instructor/lectures good(8); labs; labs(4); book(4); easy(2); order of topics**

What, if anything, would you change about this course?

**more hands on work/programming(3); more depth in some subjects(4); eliminate group work; lectures boring; TAs not very knowledgeable; change the required attendance policy; too easy(2); more hands on work/programming/class interaction(7); too easy; make it online; more indepth text(5); slides boring(4); order of topics (programming earlier); more business issues**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**do not use book; more hands on activities in computers; bring in working professionals to talk; evaluate other textbooks/manuals; move ethics lab earlier**

Fall02/Spring03 Corrective Action (on course)

**Fall 2003 - new book/lab manual**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**make course more CS topic comprehensive with textbook**

Spring 03 Sections - Instructor(s) -

Student Count= Assessment Count=

Did you understand what was expected of you in the course? Y= N=

Do you think that you achieved the course goals for the course? Y= N=

Were you adequately prepared to take this course by prerequisite computer science courses? Y= N= N/A=

What did you like best about this course?

What, if anything, would you change about this course?

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

Fall 02 Sections - **CS100-001/002 & 003/004** Instructor(s) - **Frieder/Bauer, M**

Student Count=**50** Assessment Count=**20**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**100%** N=**0%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**35%** N=**20%**  
N/A=**45%**

What did you like best about this course?

**relaxed class but still learning(2); good overview and learn basics of several new languages/technology(cgi, perl, php, javascript)(2); discussion sessions about topics(5); range of topics(5); independent learning (figuring out programming languages Perl Java); instructor was fun/good(2); no final exam; wasn't difficult(2); projects and labs were practical and not so theoretical; robotwars**

What, if anything, would you change about this course?

**return lab assignments with comments; don't ramble; long lectures; less lecturing more like final presentation; more description on topics; need food; don't make attendance mandatory(2); more specific instructions/guidance on assignments(3); go slower for students with no background(2); make it more advanced**

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**none**

S02 Planned Course Enhancements

**o Update catalog description to be more CS specific (Fall 2002)**

**o Stress problem solving, algorithms, recursion, and design independent of programming language. (Fall 2002)**

**o Add more overviews of CS topics - databases/data mining, networks, programming languages/compilers, graphics, cryptography (Fall 2002)**

## Course Assessments

CS105 - Introduction to Computer Programming I Course Manager - Bauer, M  
(most recent semester first, **recommendations in red, changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

### Issues

- **too hard for some vs. too easy for others (I think the CS105/CS115 seperation solves this)**
- **investigate new lab manual and book (hopefully online for free for one of them) I have 5 requests in for textbooks to review. I'll let you know when I have seen them.**
- **make changes to lab (either go back to grading, or give quizzes, or better prepare TAs) - I think the largest need is to make sure the TAs are ready to lead their labs appropriately.**

Fall 03 Sections - **CS105 All Sections** Instructor(s) - **Hanrath**

Student Count=**234** Assessment Count=**130**

Did you understand what was expected of you in the course? Y=**99%** N=**1%**

Do you think that you achieved the course goals for the course? Y=**95%** N=**5%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**34%** N=**12%**  
N/A=**55%**

What did you like best about this course?

**problem solving/programming/challenging(16); instructor/lecture(20); labs(3); online notes; project challenging; easy course; easy/fun(4); lab(4); instructor/lecture(35); problem solving/programming/challenging(11); exams good; project good; attendance not required; TA good; doing labs is your own choice; HTML; online notes(2); slow pace(4); instructor/lecture(16); PCs/Software good; problem solving/programming/challenging(9); labs(2)**

What, if anything, would you change about this course?

**lab TAs ineffective/grade labs(8); lab manual bad(4); pace too slow(5); pace too fast; too much work for 2 credit hours; lecture too early(2); project too hard/rushed(6); add reviews for tests/quizzes; lab TAs ineffective/grade labs(17); do not require for non-CS(5); lab manual bad(12); too easy(5); pace(too slow at start, too fast at end); textbook not used; lectures too big; project too hard(3); too much work for 2 credit hours(2); should be textbook(2); should have computer pre-req; Lab should follow lecture at night; lab TAs ineffective/grade labs(5); lab manual bad(10); lecture examples should be real world, not just syntax(2); project given to late; textbook/lecture did not jive; more HTML; no night classes; more debugging**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**nothing**

CS Undergraduate Committee - CS105 Course Review - Spring 2003

**During the Spring 2003 semester a detailed course review was done of CS105. The following materials were collected and reviewed by the CS Undergraduate Studies Committee and discussed with the instructor:**

- **Course Overview. syllabus, textbook, lab manual, lecture notes**
- **Sample graded labs, quizzes, exams**

### Conclusions were:

- **Separate CS(make it CS115, Java) from non-CS in intro programming course**
- **Stress problem solving more on exams than definitions and syntax in CS115**
- **Increase design and debugging content in CS115**
- **Change curriculum suggested semester-by-semester schedule to have students take CS330 with CS115 or CS116**

Fall02/Spring03 Corrective Action (on course)

**Fall 2004 - create CS115/116 for CS majors only; redesign CS105 for non-CS majors**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**not rigorous enough for CS majors; not applicable to non-CS majors**

Spring 03 Sections - **CS105 All Sections** Instructor(s) - **Hanrath**

Student Count=**101** Assessment Count=**54**

Did you understand what was expected of you in the course? Y=**98%** N=**2%**

Do you think that you achieved the course goals for the course? Y=**91%** N=**9%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**22%** N=**9%**  
N/A=**69%**

What did you like best about this course?

**instructor(14); no labs due; problem solving/programming(11); fair tests; TA good explanation; no homework; www lecture notes; instructor(13); problem solving/programming(8); lecture/lab same night; no labs due; instructor(14); no labs due; problem solving/programming(11); fair tests; TA good explanation; no homework; www lecture notes**

What, if anything, would you change about this course?

**exams should be on computers(2); more time for project/too complicated(3); TAs need to explain more(8); labs should be graded(8); lab manual & textbook; shoulexams should be on computers(2); more time for project/too complicated(3); TAs need to explain more(8); labs should be graded(8); lab manual & textbook; should not be required for non-cs; too much work for 2 credit hours; pace bad (too slow at start, too fast at end)(3); labs should be graded(4); do more work in labs; allow group project; larger font on powerpoint; should not be required for non-cs(3); order of topics not be required for non-cs; too much work for 2 credit hours; pace bad (too slow at start, too fast at end)(3)**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**exams should be on computers(2); more time for project/too complicated(3); TAs need to explain more(8); labs should be graded(8); lab manual & textbook; shoulexams should be on computers(2); more time for project/too complicated(3); TAs need to explain more(8); labs should be graded(8); lab manual & textbook; should not be required for non-cs; too much work for 2 credit hours; pace bad (too slow at start, too fast at end)(3); labs should be graded(4); do more work in labs; allow group project; larger font on powerpoint; should not be required for non-cs(3); order of topics not be required for non-cs; too much work for 2 credit hours; pace bad (too slow at start, too fast at end)(3)**

Fall 02 Sections - **CS105 All Sections** Instructor(s) - **Hanrath/Winans**

Student Count=**224** Assessment Count=**100**

Did you understand what was expected of you in the course? Y=**96%** N=**4%**

Do you think that you achieved the course goals for the course? Y=**87%** N=**13%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**35%** N=**14%**  
N/A=**51%**

What did you like best about this course?

**instructor(12); TA helpful; function declarations; labs made material easy(8); easy/interesting(7); labs explained before lab(2); beginning weeks easy(2); instructor nice; interesting/new/challenging(11); lab manual/labs(13); pace was good(2); problem solving(4); TAs; new/interesting(3); problem solving; instructor/lectures(13); class participation; labs/manual(4); fair exams**

What, if anything, would you change about this course?

**lab periods too short(2); exams/quizzes only on topics covers in the labs so far(2); pre-labs too hard(2); labs don't always match lecture; HTML(2); change lab manual (AP vs STL)(2); TA not helpful/late(3); lectures/exams should have computers in them for students(2); smaller lecture sizes; less core labs and more time for project; more problem solving; more lecture and lab time(2); TA Office hours should be before lab in week; ending topics/project too difficult(2); lectures boring; exams too hard/long(6); bad TA; too had for no pre-req; less lecture more lab(8); more engineering topics; post lecture slides(2); separate class for cs majors(4); too fast paced(8);change lab manual (AP vs STL)(2); HTML; require a**

Numbers in student comments represent number of student who made the comment

**text book; lecture boring/instructor bad(54); smaller lecture size(3); more time for project(2); lecture on board/overhead too small; lectures/exams should have computers in them for students(4); labs don't always match lecture; lab work on exams; too fast paced; separate class for cs majors; labs don't always match lecture; make labs more challenging; bad lecture classroom(2); too slow; lab should be after class**  
Fall 02 Instructor - If you were to teach the course again, what changes would you make?  
**broad range of student abilities, tried to raise expectations and challenge more; weekly inlabs helped, but TAs too lenient in grading; copying final project is a problem**

S02 Planned Course Enhancements

- o Change catalog description to include objected-oriented approach. (Summer 2002)**
- o Change to "objects-first" approach. (Fall 2002)**
- o Stress problem solving, algorithms, and design more than programming language. (Fall 2002)**

## Course Assessments

CS106 - Introduction to Computer Programming II Course Manager - Bauer, M  
(most recent semester first, **recommendations in red, changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

**mostly first-time instructor problems. Change to cs115/116 with objects programming first (instead of procedural programming first) should help the overall OO ability after CS116**

Fall 03 Sections - **CS106 All Sections** Instructor(s) - **Sasaki**

Student Count=**24** Assessment Count=**18**

Did you understand what was expected of you in the course? Y=**89%** N=**11%**

Do you think that you achieved the course goals for the course? Y=**72%** N=**28%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**83%** N=**6%**  
N/A=**11%**

What did you like best about this course?

**open lecture discussion; objects/classes; programming/problem solving; easy grading; only one lecture/lab per week(4); instructor nice(3)**

What, if anything, would you change about this course?

**bad instructor/bad lectures/less theory(5); no correlation lecture to lab(7); assignments given late and confusing(3); more programs from scratch(3); more debugging; too much material covered**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**review file I/O; more debugging; more algorithm analysis; more recursion; try to fit in templates; tighter coordination between lectures/labs/quizzes**

Fall02/Spring03 Corrective Action (on course)

**Fall 2003 - adjust syllabus so faster at beginning**

**Fall 2004 - CS115/CS116 for CS majors only should help**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**too fast paced at end; too hard compared to CS105**

Spring 03 Sections - **CS106 All Sections** Instructor(s) - **Bauer**

Student Count=**62** Assessment Count=**36**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**62%** N=**38%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**97%** N=**3%**  
N/A=**0%**

What did you like best about this course?

**instructor(7); problem solving/programming(16); labs/inlabs(12); not too hard(2); TA(2)**

What, if anything, would you change about this course?

**improve lectures(10); grading too hard(2); lecture should be shorter and twice per week(4); too slow paced(3); better prep needed from cs105(2); shorter inlabs(7); should be three exams instead of two; better textbook(3); test concepts not programming(2); more help needed from lab TAs; project too vague**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**improve lectures(10); grading too hard(2); lecture should be shorter and twice per week(4); too slow paced(3); better prep needed from cs105(2); shorter inlabs(7); should be three exams instead of two; better textbook(3); test concepts not programming(2); more help needed from lab TAs; project too vague**

Fall 02 Sections - **CS106 All Sections** Instructor(s) - **Bole**

Student Count=**26** Assessment Count=**19**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**95%** N=**5%**

Numbers in student comments represent number of student who made the comment

Were you adequately prepared to take this course by prerequisite computer science courses? Y=89% N=5%  
N/A=5%

What did you like best about this course?

**instructor(5); interesting/challenging/good prep for other CS(5), labs(4); TAs(2); project**

What, if anything, would you change about this course?

**too hard grading/tests too long(3); too hard for no pre-req; 2 lectures/week needed(3); too many labs assigned at end; more topics covered; more classes/objects; too much work for 2 credit hours; textbook too difficult; better lecture organization; too fast paced;**

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**remove HTML related assignments**

S02 Planned Course Enhancements

**o Change to "objects-first" approach and full coverage of Object-Oriented concepts (including composition, inheritance, and polymorphism). (Fall 2002)**

**o Potential classification as a "C" course (communications intensive) (Fall 2002)**

**o Stress problem solving, algorithms, recursion, and design more than programming language. (Fall 2002)**

**o Change "Prerequisite: CS 105 or consent of instructor." to "Prerequisite: Grade of 'C' or better in CS 105 or consent of instructor."**

**o Change programming language to Java. (Fall 2003)**

## Course Assessments

CS200 - Introduction to C++ Programming Course Manager - Bauer, M  
(most recent semester first, **recommendations in red, changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

**Issues (I think some things will be solved with the extra lecture hour, also with another semester experience)**

**- some students not challenged vs. some students thought too hard - Adjust the difficulty and pace of the course. Find shorter interactive activities/ engaging activities for lecture. I think we should demand more from those who had some experience with Java and want to be challenged, but maintaining a balance for the beginners. For example, in the past I asked one student to implement all searching algorithms and impede some code to measure and analyze each then present the outcome to the class. Maybe a better way to gauge student preparedness before class (or in the first week) For undergrads we could then move to CS115, for grads, they need to stay in CS201 and work hard**

**- add UML**

**- add more event driven and applets - I don't think at this point we should change the lab manual, but we can assign more labs outside the manual. If we do so, then we can add more event driven/applets labs.**

**- review possible book/lab manual changes, I need to write some intermediate lab manual this summer OR find an lab manual that is designed for a second-level programming course rather than introductory course.**

Fall 03 Sections - **CS200 01 & 071** Instructor(s) - **Winans/Aldawud**

Student Count=**45** Assessment Count=**24**

Did you understand what was expected of you in the course? Y=**96%** N=**4%**

Do you think that you achieved the course goals for the course? Y=**75%** N=**25%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**75%** N=**4%**  
N/A=**21%**

What did you like best about this course?

**java(7); good design/problem solving(4); labs(6); book; project(2); GUI(2); lectures; GUI; TA; lab; instructor; programming/design**

What, if anything, would you change about this course?

**more programming/less design(4); too easy; cover more material(5); change lab manual(2); change to C++(3); more time on difficult concepts(4); longer lecture; change text(2); objects early is too hard; more lab/less lecture; exam questions vague(2); top broad; expects students to know too much as pre-req; hard to read lectures over IIT/V(2); more GUI**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**add UML; more event driven and applets; more time for recursion and arrays; place advanced students into CS331; add UML; more event driven; more time on OO concepts; team project instead of individual work**

Fall02/Spring03 Corrective Action (on course)

**Fall 2003 - new book/lab manual**

**Spring 2004 - add a credit hour**

**Improve selection process for placement into CS105 or CS200**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**too fast paced; lab manual/textbook not good**

Spring 03 Sections - **CS200 Day & Night** Instructor(s) - **Winans/Bole**

Student Count=**50** Assessment Count=**22**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**91%** N=**9%**

Numbers in student comments represent number of student who made the comment



Were you adequately prepared to take this course by prerequisite computer science courses? Y=82% N=5%  
N/A=14%

What did you like best about this course?

**challenge/critical thinking(2); programming(4); pace good(2); instructor/lectures(2); labs/project(2); inlabs/project(4); a lot of material covered well/challenge(3); instructor(7); programming**

What, if anything, would you change about this course?

**slower pace(2); more lab time(2); end of semester too fast; not enough time on quizzes/tests(5); teacher confusing; too much work for non-majors; recursion not covered; lecture/lab should twice per week/more time(3); lab manual bad; inlabs too long; more on problem solving/logical thinking; more hands-on during lecture; too much for 3 credit hours;**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**slower pace(2); more lab time(2); end of semester too fast; not enough time on quizzes/tests(5); teacher confusing; too much work for non-majors; recursion not covered; lecture/lab should twice per week/more time(3); lab manual bad; inlabs too long; more on problem solving/logical thinking; more hands-on during lecture; too much for 3 credit hours;**

Fall 02 Sections - CS200-001 thru 005 & 071/390 Instructor(s) - Miranda/Aldawud

Student Count=70 Assessment Count=39

Did you understand what was expected of you in the course? Y=87% N=13%

Do you think that you achieved the course goals for the course? Y=87% N=13%

Were you adequately prepared to take this course by prerequisite computer science courses? Y=69% N=15%  
N/A=15%

What did you like best about this course?

**labs/lab manual(12); not too hard(4); TA(3); fast pace(2); interesting(6); lectures OK; class time; project; lab; interesting**

What, if anything, would you change about this course?

**lab manual confusing/boring(3); textbook too long/hard; less lecture/more lab; test on computer(3); lecture/instructor confusing/bad(11); project bad(6); exams/labs don't always match lecture(3); rushed at end; different class hours/too short lecture(3); too much work(5); HTML(3); change lab manual (AP vs STL); less lecture/more lab**

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**more OO concepts/labs; more pointers**

S02 Planned Course Enhancements

**o Change course name and catalog description to "Accelerated Introduction to Computer Programming" to remove C++ and to better describe CS200's relationship to CS105 and CS106. (Summer 2002)**

**o Potential classification as a "C" course (communications intensive) (Fall 2002)**

**o Change to "objects-first" approach and full coverage of Object-Oriented concepts (including composition, inheritance, and polymorphism). (Fall 2002)**

**o Stress problem solving, algorithms, recursion, and design more than programming language. (Fall 2002)**

**o Change programming language to Java. (Fall 2003)**

## Course Assessments

CS330 - Discrete Structures Course Manager - Kapoor

(most recent semester first, **recommendations in red**, **changes in blue**)

CS Undergraduate Committee - CS330 Course Review – Fall 2003

**During the Fall 2003 semester a detailed course review was done of CS330. The following materials were collected and reviewed by the CS Undergraduate Studies Committee and discussed with the instructor:**

- **Course Overview. syllabus, textbook, lab manual, lecture notes**
- **Sample graded labs, quizzes, exams**

**Conclusions were:**

- **Review objectives/syllabus for possible slight adjustments (see details below)**
- **Increase real-world/CS applications of discrete structures**

**Detailed Notes:**

**Lecture/Syllabus Review - The lecture material covers all the topics in the syllabus quite well to a satisfactory depth for this survey course, with the exception of formal models of computation. I don't think, however, that this is a serious lack, provided that formal models of computation are covered in depth in a later course (CS440). There should, however, be some discussion of computability, i.e., the Halting Problem, recursive and recursively-enumerable sets, and so on. Another small issue is in the discussion of Predicate Calculus, in that function symbols are not mentioned at all, though without them, expressiveness is considerably reduced. Also, it would be nice to have a discussion somewhere in the curriculum of the semantics of First-Order Logic together with proof theory, however, that may require more mathematical sophistication, and certainly would require knowledge of most topics discussed in this course, so it should probably not be covered in this course. In all, the lecture material as it stands is of high quality and good coverage. (Contributed by Shlomo Argamon.)**

**Assignment Review - The errors are clearly marked, thus, the students know where they lose points. Students received the solution to the questions for each exams to be able to see and learn the correct answers to the problems. Considering having such solution sheets, the amount of the feedback to the students on their graded exam has been minimal, assuming the marked problems along with the solution sheet will be sufficient. (Contributed by Nazli Goharian.)**

**Assignment Review - I saw a sample of the work the covered counting, recursion, and relations. The breadth of coverage of the material was decent, although I didn't see anything on Bayes Theorem (conditional probability). Judging from the answers given to the students, the homework problems were described in a high-level manner, using real-world cases. I did not look at the text, so I do not know the exact forms of the questions. The questions on the exam I saw (exam 2) were more analytical in nature, and therefore do not test the student's ability to apply concepts as well as the homeworks may. This might have been done for expedience, as the students are under time-pressure in an exam. (Contributed by Wai Gen Yee.)**

**Syllabus Review - When I taught 330, I did not have time for the whole of the syllabus. In particular, the material on models beyond FSAs got skipped. I did do Bayes thm. (Reingold)**

Fall03 Course Manager Recommendations on Course (not instructor)

**Include more real world examples and more CS significance**

Fall 03 Sections - **CS330 & MATH230** Instructor(s) - **Bauer/McGee**

Student Count=**55** Assessment Count=**40**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**83%** N=**18%**

Numbers in student comments represent number of student who made the comment

Were you adequately prepared to take this course by prerequisite computer science courses? Y=80% N=8% N/A=13%

What did you like best about this course?

**lectures/instructor/slides(15); math focus; easy; good pace(4); advanced topics(5); coincided with ECE218; homework; real applications in CS; lectures(5); homework**

What, if anything, would you change about this course?

**too much math notation; more in depth in topics; hw weighted too heavily; more examples(6); don't teach from powerpoint(5); worked out answers; more homework assignments/less problems each; put slides on www; textbook too difficult(4); instructor bad(2); TA bad(2); more CS applications(4); more assignments collected**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**more real world examples; more CS significance; more interaction in lectures; possible trim content**

Fall02/Spring03 Corrective Action (on course)

**Fall 2003 - review CS330 by CS UG Studies; possible redesign for Fall 2004**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**students found course too hard; possible lack of math maturity in students**

Spring 03 Sections - CS330 & MATH230 Instructor(s) - Reingold/McGee

Student Count=84 Assessment Count=43

Did you understand what was expected of you in the course? Y=88% N=12%

Do you think that you achieved the course goals for the course? Y=83% N=17%

Were you adequately prepared to take this course by prerequisite computer science courses? Y=70% N=12% N/A=16%

What did you like best about this course?

**lecture notes available(4); HW/exams related to lectures(3); algorithm analysis(2); data structures; good review of math; instructor(6); problem solving(5); finite state machines; instructor(10); topics(10); hw not collected; frequency of exams**

What, if anything, would you change about this course?

**more HW so all topics covered(3); real world examples(3); less math theory(2); how to find a recurrence relation; HW should be assigned/graded before exam(2); exams/HW too hard(3); TA english bad(2); order topics to match data structures(3); lecture not related to book or TA(3); teacher handwriting/explaining bad(2); more pictures/less words; hw/project too much work(2); less exams; not related to textbook/cover all topics(2); collect hw; instructor late/unorganized; more real world applications; course too slow; connection to CS unclear; better review before exam**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**more HW so all topics covered(3); real world examples(3); less math theory(2); how to find a recurrence relation; HW should be assigned/graded before exam(2); exams/HW too hard(3); TA english bad(2); order topics to match data structures(3); lecture not related to book or TA(3); teacher handwriting/explaining bad(2); more pictures/less words; hw/project too much work(2); less exams; not related to textbook/cover all topics(2); collect hw; instructor late/unorganized; more real world applications; course too slow; connection to CS unclear; better review before exam**

Fall 02 Sections - CS330 & MATH230 Instructor(s) - Bistriceanu/McGee

Student Count=64 Assessment Count=0

Did you understand what was expected of you in the course? Y=n/a N=n/a

Do you think that you achieved the course goals for the course? Y=n/a N=n/a

Were you adequately prepared to take this course by prerequisite computer science courses? Y=n/a N=n/a N/A=n/a

What did you like best about this course?

What, if anything, would you change about this course?

Numbers in student comments represent number of student who made the comment

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**none**

S02 Planned Course Enhancements

**o New course description - Introduction to the use of formal mathematical structures to represent problems and computational processes. Topics covered include sets, functions and relations, counting methods, recursive structures, logic, partially ordered sets, graphs, formal machines and languages.**

**Prerequisite: CS 106 or CS 200. (3?0?3) (Fall 2002)**

**o Replacement of programming assignments with additional quizzes or homework assignments (Fall 2002)**

## Course Assessments

CS331 - Data Structures and Algorithms Course Manager - Calinescu

(most recent semester first, **recommendations in red, changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

**The undergraduate committee could consider adding one extra teaching/credit hour to this course. But maybe we should see first how the new version, taught in Java, is doing.**

Fall 03 Sections - **CS331 All Sections** Instructor(s) - Saelee

Student Count=**58** Assessment Count=**28**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**89%** N=**11%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**93%** N=**7%**  
N/A=**0%**

What did you like best about this course?

**instructor/lecture(10); easy; set pace to students; final project(3); topics interesting/programming(8); labs**

What, if anything, would you change about this course?

**TA unavailable; too slow(2); add more labs(2); TA bad; too fast/too hard(2); instructor too busy/delayed grading; start project earlier(2); less students per lab; course info needed on www; more applications of data structures; longer lectures**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**add labs on general OO concepts i.e.inheritance, composition, etc; lectures more interactive on ADT applications and API design principles; more time on motivation/application of ADTs instead of just implementation; more UML in project design and examples to illustrate planning in s/w design**

Fall02/Spring03 Corrective Action (on course)

**Starting Fall 2003 - CS115/116/200 switch to CS only, increased time and Java will influence future CS331**

**Fall 2004 - Possible redesign of CS330 may help CS331**

**Spring 2004 - Spring 2005 - must support C++ and Java**

**Fall 2005 - Can be Java only and possible increase in data structures and more object-oriented theory**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**pre-req knowledge of pointers, OO theory and recursion weak; include more data structures; include more object-oriented theory**

Spring 03 Sections - **CS331 All Sections** Instructor(s) - Saelee

Student Count=**72** Assessment Count=**30**

Did you understand what was expected of you in the course? Y=**93%** N=**7%**

Do you think that you achieved the course goals for the course? Y=**100%** N=**0%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**93%** N=**7%**  
N/A=**0%**

What did you like best about this course?

**teacher(12); in depth C++ programming/project(5); fair grading; straightforward exams; interesting/challenging material(7); labs(5)**

What, if anything, would you change about this course?

**make team project/scope too big(8); return materials more promptly(2); slow down pace(2); don't assume pre-reqs(2); some labs are bad(2); more tests; more ADTs covered; easier tests**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**make team project/scope too big(8); return materials more promptly(2); slow down pace(2); don't assume pre-reqs(2); some labs are bad(2); more tests; more ADTs covered; easier tests**

Fall 02 Sections - **CS331 All Sections** Instructor(s) - **Calinescu**

Student Count=**64** Assessment Count=**25**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**80%** N=**20%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**100%** N=**0%**  
N/A=**0%**

What did you like best about this course?

**labs(5); instructor(6); book; object oriented design; parent/child classes; interesting(6); handouts; pointers, TAs(2); project**

What, if anything, would you change about this course?

**project(2); binary trees; better synchronization between labs/lecture; labs give too much/no chance to explore(2); CS331 credit for AP AB exam; too much work(2); more analysis of algorithms needed; more advanced object oriented design**

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**none**

S02 Planned Course Enhancements

**o Change the postlab assignments to include more theoretical content. (Fall 2002)**

**o Move object-oriented design concepts of composition, inheritance, and polymorphism to CS200 (Spring 2003)**

**o Change “Prerequisite: CS 106 or CS 200.” to “Prerequisite: Grade of ‘C’ or better in CS 106 or CS 200.”**

**o Change programming language to Java. (depends on CS200 change to Java in Fall 2003)**

## Course Assessments

CS350 - Computer Organization and Assembly Language Programming Course Manager - Li  
(most recent semester first, **recommendations in red, changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

Fall 03 Sections - **CS350 All Sections** Instructor(s) - Saelee

Student Count=**50** Assessment Count=**27**

Did you understand what was expected of you in the course? Y=**96%** N=**4%**

Do you think that you achieved the course goals for the course? Y=**93%** N=**7%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**78%** N=**15%**  
N/A=**7%**

What did you like best about this course?

**TA good; instructor/lecture(9); topics interesting(13); broad content; good pace; project(2); assembly programming; labs; hands on labs(3)**

What, if anything, would you change about this course?

**slower paced second half(3); more reading/better book; exams too hard/too few(3); more/better hw/labs(4); better project resources; better MIPS info(6); more applications/less theory; online videos/lectures(2)**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**MIPS no longer focus of early labs (fewer assembly labs in general); more focus on general ISA design concerns than discussion of specific ISA; more ISA case studies; more bottom up fashion (digital logic/number representation first); more examples in class; labs more self-contained; project more open ended and design oriented (ISA design as well); labs should allow students to experiment with each implementation**

Fall02/Spring03 Corrective Action (on course)

**Fall 2004 - investigate possible new lab manual and new text book**

**PROPOSED UPDATE (Michael Lee Fall 03) - Introduction to the internal architecture of computer systems. Focuses on the relationship between a computer's hardware, its native instruction set, and the implementation of high-level languages on that machine. Lab exercises focused on assembly language programming and simple processor design explore and analyze computer architecture. Prerequisite: CS 106 or CS 200. (2-2-3) (C)**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**less time on assembly, more time on hardware; more explanation of labs**

Spring 03 Sections - **CS350 All Sections** Instructor(s) - Saelee

Student Count=**45** Assessment Count=**35**

Did you understand what was expected of you in the course? Y=**97%** N=**3%**

Do you think that you achieved the course goals for the course? Y=**97%** N=**3%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**97%** N=**3%**  
N/A=**0%**

What did you like best about this course?

**class topics good(12); good teacher/lectures(9); broad range of topics(1); labs(9); TA good(1); merge between CS/CPE(1); easy grading(1); fast pace(1); project(6); liked everything(1)**

What, if anything, would you change about this course?

**TA poor communication(1); project too hard(should be group)/required a lot of EE knowledge(5); add more about control units(1); change nothing(7); slower pace(1); more basics/direction needed at start(5); change s/w in labs(1); not enough time in lab(4); better assignments(not just labs) to support concepts(2); more verilog HDL(2); lectures and book not together(1); less hardware/more software(1); more online documentation(1); postlabs need more direction(1)**

Numbers in student comments represent number of student who made the comment

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**TA poor communication(1); project too hard(should be group)/required a lot of EE knowledge(5); add more about control units(1); change nothing(7); slower pace(1); more basics/direction needed at start(5); change s/w in labs(1); not enough time in lab(4); better assignments(not just labs) to support concepts(2); more verilog HDL(2); lectures and book not together(1); less hardware/more software(1); more online documentation(1); postlabs need more direction(1)**

Fall 02 Sections - CS350 All Sections Instructor(s) - Saelee

Student Count=62 Assessment Count=35

Did you understand what was expected of you in the course? Y=91% N=9%

Do you think that you achieved the course goals for the course? Y=86% N=14%

Were you adequately prepared to take this course by prerequisite computer science courses? Y=77% N=20% N/A=3%

What did you like best about this course?

**interesting/challenging(2); logic & processor design/components(9); assembly language(2); MAXPLUS labs(2); project(3); how high-level languages become binaries(2); instructor encouraged questions/participation(4); TA**

What, if anything, would you change about this course?

**webpage not up-to-date(2); tests not in sync with labs/book(4); TA language problem/too strict(2); assembly labs dumb; MAXPLUS terrible; more time on project w/ circuit boards; hardware design confusing; project goals not clear(3); less assembly/more hardware, processor, memory, cache details(13); no MIPS; CPEs have advantage with ECE class background/ECE218 should be pre-req(2); longer labs(3); allow students to pick project teams; more code writing less hardware(2); assumed background in PC hardware components**

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**none**

S02 Planned Course Enhancements

**none**



## Course Assessments

CS351 - Systems Programming Course Manager – Bauer, M  
(most recent semester first, **recommendations in red**, **changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

Fall 03 Sections - **CS351 All Sections** Instructor(s) - **Dickens**

Student Count=**41** Assessment Count=**23**

Did you understand what was expected of you in the course? Y=**87%** N=**13%**

Do you think that you achieved the course goals for the course? Y=**83%** N=**17%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**87%** N=**13%**  
N/A=**0%**

What did you like best about this course?

**networking topics(3); topics(7); labs/TAs(9); game project(2); instructor; quizzes**

What, if anything, would you change about this course?

**too fast paced/information not covered in lecture(5); TAs not helpful(5); cs350 pre-req not needed; instructor bad(4); new book; bad lectures(4); too easy; bigger group project; less networking/more programming**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**MISSING**

Fall02/Spring03 Corrective Action (on course)

**Add more net-centric computing**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**more net-centric programming; faster pace**

Spring 03 Sections - **CS351 All Sections** Instructor(s) - **Dickens**

Student Count=**76** Assessment Count=**7**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**86%** N=**14%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**100%** N=**0%**  
N/A=**0%**

What did you like best about this course?

**windows programming(3); project(1); labs(2); lecture(1); TAs(1); client/server programming(1); liked nothing(1)**

What, if anything, would you change about this course?

**exam format poor(2); winsock book poor(2); labs boring/not challenging(1); too much work at end/project assigned earlier(2); lectures poor(3)**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**exam format poor(2); winsock book poor(2); labs boring/not challenging(1); too much work at end/project assigned earlier(2); lectures poor(3)**

Fall 02 Sections - **CS351 All Sections** Instructor(s) - **Dickens**

Student Count=**83** Assessment Count=**32**

Did you understand what was expected of you in the course? Y=**94%** N=**6%**

Do you think that you achieved the course goals for the course? Y=**91%** N=**9%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**88%** N=**6%**  
N/A=**6%**

What did you like best about this course?

**windows programming(9); TAs(3); project(3); how applications and OS interact; TCP/IP programming(6); lectures straightforward(3); easy class; instructor pleasant(3); interesting(5); labs**

Numbers in student comments represent number of student who made the comment

What, if anything, would you change about this course?

**networking text was bad(3); instructor bad(6); more networking/less windows(8); faster pace needed/didn't learn much(2); better slides; TAs ran project**

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**none**

S02 Planned Course Enhancements

**Major Course Redesign**

## Course Assessments

CS411 - Computer Graphics Course Manager - Agam

(most recent semester first, **recommendations in red, changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

Fall02/Spring03 Corrective Action (on course)

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**add possible linear algebra pre-requisite; evaluate new textbooks**

Spring 03 Sections - **CS411 All Sections** Instructor(s) - **Agam**

Student Count=**44** Assessment Count=**16**

Did you understand what was expected of you in the course? Y=**94%** N=**6%**

Do you think that you achieved the course goals for the course? Y=**88%** N=**13%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**100%** N=**0%**  
N/A=**0%**

What did you like best about this course?

**Open GL/programming assignments(10); math behind graphics(7); real-world(1); range of topics(1)**

What, if anything, would you change about this course?

**more Open GL in lecture(3); more small projects(1); too much reliance on OpenGL(1); more focused(1); more game industry material(1); matrices should be pre-req(4); too much math/not enough CS(3); change nothing(1); more online notes(2); should be a lab course with lab TA(1); final too heavily weighted(1); more 3D(1); tutorial for openGL needed(1); midterm too long(1)**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**more Open GL in lecture(3); more small projects(1); too much reliance on OpenGL(1); more focused(1); more game industry material(1); matrices should be pre-req(4); too much math/not enough CS(3); change nothing(1); more online notes(2); should be a lab course with lab TA(1); final too heavily weighted(1); more 3D(1); tutorial for openGL needed(1); midterm too long(1)**

S02 Planned Course Enhancements

**o Consider making Linear Algebra required course to the BS in CS degree. Either replace “MATH251-multi-variate and vector calculus” or the current Math Elective in the curriculum.**

## Course Assessments

CS422 - Data Mining Course Manager - Goharian

(most recent semester first, **recommendations in red, changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

Fall02/Spring03 Corrective Action (on course)

**Intro programming changes/improvements should help**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**pre-requisite programming skills not always up to par (could be undergrad vs. grad problem)**

Spring 03 Sections - **CS422 All Sections** Instructor(s) - **Goharian**

Student Count=**46** Assessment Count=**26**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**92%** N=**8%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**85%** N=**15%**  
N/A=**0%**

What did you like best about this course?

**topics/algorithms(8); assignments/programs(15); new field/research possibilities(2);  
instructor/lectures(6); real world(2); simpleDM(1); instructor/TA support on assignments(1)**

What, if anything, would you change about this course?

**change nothing(3); too much work(3); geared towards grad students(2); more algorithms/topics(1);  
more weight to programming than exams(1); tutoring for DM tool(1); too much programming/not  
enough theory & applications(5); improve slides at end(1); clustering not taught well(1); add design  
concepts(1)**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**change nothing(3); too much work(3); geared towards grad students(2); more algorithms/topics(1);  
more weight to programming than exams(1); tutoring for DM tool(1); too much programming/not  
enough theory & applications(5); improve slides at end(1); clustering not taught well(1); add design  
concepts(1)**

S02 Planned Course Enhancements

**none**

## Course Assessments

### CS425 - Database Organization Course Manager - Goharian (most recent semester first, **recommendations in red**, **changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

#### **Same as Instructor Comments**

Fall 03 Sections - **CS425 All Sections** Instructor(s) - **Goharian**

Student Count=**49** Assessment Count=**17**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**100%** N=**0%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**94%** N=**6%**  
N/A=**0%**

What did you like best about this course?

**practical applications(9); interesting(4); good intro to DB(3); topics(3); pace/flow; hw/project good(3); advanced topics/presentation(2)**

What, if anything, would you change about this course?

**project too large; eliminate presentation; too much SQL; more lab time; java should be pre-req; assignments not clear**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**nothing**

Fall02/Spring03 Corrective Action (on course)

**Intro programming changes/improvements should help**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**pre-requisite programming skills not always up to par (could be undergrad vs. grad problem)**

Spring 03 Sections - **CS425 All Sections** Instructor(s) - **Goharian**

Student Count=**51** Assessment Count=**0**

Did you understand what was expected of you in the course? Y=**n/a** N=**n/a**

Do you think that you achieved the course goals for the course? Y=**n/a** N=**n/a**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**n/a** N=**n/a**  
N/A=**n/a**

What did you like best about this course?

**n/a**

What, if anything, would you change about this course?

**n/a**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**n/a**

Fall 02 Sections - **CS425 All Sections** Instructor(s) - **Goharian**

Student Count=**57** Assessment Count=**19**

Did you understand what was expected of you in the course? Y=**95%** N=**5%**

Do you think that you achieved the course goals for the course? Y=**100%** N=**0%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**84%** N=**11%**  
N/A=**5%**

What did you like best about this course?

**database design scenarios(8); instructor helpful(3); SQL/Oracle/real world applicable(12); score weight of assignments (hw, project, exam); group project(4); not too difficult; slides posted**

What, if anything, would you change about this course?

**group work difficult to manage (esp for remote); hard to hear class questions for internet students; TA not helpful; some HW and Exam questions not clear; all group members should answer questions during presentation; more focus on SELECT(3); cover more material/more detail(5); break project into smaller parts(5); more relational algebra detail; post all solutions to hw/exams; instructor**

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**None**

S02 Planned Course Enhancements

**o Changing the name of CS425 from “Database Organization” to “Database Design and Applications”.**

**New Course Description: This course provides an overview to database management systems such as hierarchical, network, object oriented and relational. The course covers fundamental database concepts with the focus on the relational DBMS. Students in detail learn relational data modeling and design, abstract relational languages, and structured query language (SQL). The DBMS implementation topics including file organization, indexing, and query processing are discussed. An overview of query optimization, recovery, and concurrency control is given in the course. Students build a database application for their course project. Prerequisite: CS 331 or CS 401 or CS403. (Fall 2002)**

**o Creating a new 500 level course (CS520) with the name of “Database Design and Engineering”. Course prerequisite: (CS 351 or CS 402 or CS403) and (CS 430 or CS406). (3-0-3) (T). Description: Course covers design and implementation and engineering of the database management system. Students build the RDBMS engine for their class project. The students can take either CS425 or the new CS500 level course, but not both courses. (Approved by CS Graduate Committee, starting in Fall 2002)**

**o Including 1 optional oral presentation of 15 minutes for each student. (Fall 2002)**

## Course Assessments

CS429 - Information Retrieval Course Manager - Goharian  
(most recent semester first, **recommendations in red, changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

**Same as Instructor Comments**

Fall 03 Sections - **CS429 All Sections** Instructor(s) - **Goharian**

Student Count=**46** Assessment Count=**21**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**95%** N=**5%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**90%** N=**5%**  
N/A=**5%**

What did you like best about this course?

**challenging(6); good programming/projects(12); instructor(5); good theory/applications(10); TA**

What, if anything, would you change about this course?

**exams too hard/answers fuzzy(3); project framework not easy to use/need lab(4); project too hard(3); more theory(2); TA hours; eliminate group work; make class format like data mining class; too much work(3); project weight increased**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**nothing**

Fall02/Spring03 Corrective Action (on course)

**Intro programming changes/improvements should help**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**pre-requisite programming skills not always up to par (could be undergrad vs. grad problem)**

Fall 02 Sections - **CS429 All Sections** Instructor(s) - **Goharian**

Student Count=**15** Assessment Count=**13**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**92%** N=**8%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**100%** N=**0%**  
N/A=**0%**

What did you like best about this course?

**practical knowledge(2); projects/assignments(9); everything; instructor/lectrues(3); TA; research(2)**

What, if anything, would you change about this course?

**more detail on project; 2nd half of course difficult; alot of programming/too much work(4); add real products(2); too much shell given for project; put lectures on internet; course slides should be made available; compression; more advanced topics should be added**

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**none**

## Course Assessments

CS430 - Introduction to Algorithms Course Manager - Kapoor  
(most recent semester first, **recommendations in red, changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

**Strengthen CS331/401, cover more data structures (heap, graph, hash) and more runtime/memory analysis in CS331/401, this will relieve some early topics from CS430 and allow more time, deep coverage of other topics.**

Fall 03 Sections - **CS430 All Sections** Instructor(s) - **Bauer, M**

Student Count=**70** Assessment Count=**18**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**83%** N=**17%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**78%** N=**11%**  
N/A=**11%**

What did you like best about this course?

**topics(11); quizzes good(3); instructor(3); project good(3);**

What, if anything, would you change about this course?

**textbook difficult; focus more on implementation(lab)/applications less on theory(2); give data container for project; quizzes graded too hard; class boring; spread work over more hw and exams(3); hw too hard/give clues/explain(2); too slow; instructor not prepared; more visual lectures/less ppt; overlap with cs330; more depth/less width; CS535 repeats this content; too hard; too fast at end**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**more problem review/examples in class; more visual demos of algorithms**

Fall02/Spring03 Corrective Action (on course)

**Fall 2004 - Review of overlap with CS330 (after CS330 redesign); add more advanced topics; changes here affect CS535**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**possible CS330/CS406 topic overlap (basic algorithm analysis and sorting)**

Spring 03 Sections - **CS430 All Sections** Instructor(s) - **Bauer, M**

Student Count=**48** Assessment Count=**17**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**88%** N=**12%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**88%** N=**0%**  
N/A=**12%**

What did you like best about this course?

**topics(7); instructor/lectures(4); theory based(1); grading fair/expectations set(1); good pace/organized(3); lecture notes/slides(1)**

What, if anything, would you change about this course?

**cover more topics(1); more real-world applications(1); more math pre-req needed(1); change nothing(1); too hard/too many topics(2); book too hard(1); speak more slowly(1)**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**cover more topics(1); more real-world applications(1); more math pre-req needed(1); change nothing(1); too hard/too many topics(2); book too hard(1); speak more slowly(1)**

Fall 02 Sections - **CS430 All Sections** Instructor(s) - **Bauer, M**

Student Count=**49** Assessment Count=**24**

Did you understand what was expected of you in the course? Y=**96%** N=**4%**

Do you think that you achieved the course goals for the course? Y=**88%** N=**13%**

Numbers in student comments represent number of student who made the comment



Were you adequately prepared to take this course by prerequisite computer science courses? Y=92% N=8%  
N/A=0%

What did you like best about this course?

**project(4); instructor(5); Big O, math, algorithm approaches(8); optional topics; order of topics/level of detail(2); graphs(20; examples in class; challenge(2); helped make sense of cs480**

What, if anything, would you change about this course?

**homework not evenly distributed across semester(3); too hard/quick(2); TA bad; more programming assignments(2); order of topics(trees nearer beginning); CS330 did not prepare me; CS330 overlap(graphs); more detail of math of big O; more real-world applications; more pseudocode/less proofs and theory(2); better project; exams too hard; book too hard(2)**

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**none**

S02 Planned Course Enhancements

**o Classification as Communications (C) Course (Fall 2002)**

## Course Assessments

CS440 - Programming Languages and Translators Course Manager - Li

(most recent semester first, **recommendations in red**, **changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

Fall 03 Sections - **CS440 All Sections** Instructor(s) - **Koutsogiannkis**

Student Count=**35** Assessment Count=**13**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**85%** N=**15%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**100%** N=**0%**  
N/A=**0%**

What did you like best about this course?

**challenging; interesting; topics(6); instructor(3); quizzes**

What, if anything, would you change about this course?

**too much note-taking(2); too many goals/no flow(2); more programming; textbook hard to understand(6)**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**increase examples involving implementation techniques for various algorithms, as they relate to various parts of the compilation process or run-time environment process**

Fall02/Spring03 Corrective Action (on course)

**Develop new course overview with Beckman input; Possible addition of second elective course in compilers**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**review textbook choice and programming language (ICON) choice**

Spring 03 Sections - **CS440 All Sections** Instructor(s) - **Koutsogiannkis**

Student Count=**50** Assessment Count=**15**

Did you understand what was expected of you in the course? Y=**93%** N=**7%**

Do you think that you achieved the course goals for the course? Y=**100%** N=**0%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**100%** N=**0%**  
N/A=**0%**

What did you like best about this course?

**instructor/lectures(5); assignments fair(4); TA good(2); yahoo discussion good(1); topics/ICON(6); well organized(2)**

What, if anything, would you change about this course?

**programming assignments not related to course(1); textbook poor(2); pace too fast/unorganized(3); notes in whiteboard/don't stand in front of(1); confusing material(1); instructor poor(1); change nothing(3)**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**programming assignments not related to course(1); textbook poor(2); pace too fast/unorganized(3); notes in whiteboard/don't stand in front of(1); confusing material(1); instructor poor(1); change nothing(3)**

Fall 02 Sections - **CS440 All Sections** Instructor(s) - **Koutsogiannakis**

Student Count=**39** Assessment Count=**26**

Did you understand what was expected of you in the course? Y=**88%** N=**12%**

Do you think that you achieved the course goals for the course? Y=**85%** N=**15%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**100%** N=**0%**  
N/A=**0%**

What did you like best about this course?

**projects/programming(6); open book/notes exams(4); lecture notes(4); learning about different languages(6); instructor(3); fast pace; ICON; how compiler works(4); other courses tied in(2)**

Numbers in student comments represent number of student who made the comment

What, if anything, would you change about this course?

**course needs complete redesign(2); instructor knows nothing(2); homework not challenging(2); languages used are ridiculous(2); overlap with other courses (cs450 concurrency, etc)(2); change textbook(6); too theory heavy/more practical analysis; more help for programming assignments; more compiler details (registers, etc) (3); more detail on programming languages; no more icon, more prolog; more feedback on assignments; lectures more interactive(2); homework not related to lectures**

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**Add more up-to-date topics**

S02 Planned Course Enhancements

**o New course goal: This course teaches advanced principles of computer programming language design. It includes major programming language paradigms in a unified framework, providing a sound practical and theoretical basis for programming language design. It emphasizes the view that programs and languages are mathematical structures amenable to rigorous analysis. (Fall 2002)**

**o New course catalog description: Introduction to a myriad of programming languages, their structure, and their implementation. Basic language design principles; abstract data types (lists, arrays, user-defined types); functional languages; type systems; object-oriented languages. Using imperative and functional programming as unifying themes, major language design paradigms will be explored. Prerequisite: CS 330, CS 351. (3-0-3) (Fall 2002)**

**o Introduce more programming languages to the class to make students be exposure to a myriad of programming languages. (Fall 2002)**

**o Although the topics on grammars are present in the current textbook for cs440, it's not given enough relevance in the course syllabus. Practical approach to these topics and making students use interesting parsing tools and compilers would help them gain more insights into the topics such as grammars. (Spring 2003)**

**o Introduce a new 400 level compiler course that introduces the principles, techniques, and tools for the design and construction of compilers for modern programming languages. It will cover topics such as grammar construction, parsing, compiler structure, syntax analysis, syntax-directed translation, compiler construction tools, semantic analysis, intermediate representation, code generation, optimization techniques. (Fall 2003)**

## Course Assessments

CS441 - Current Topics in Programming Languages Course Manager - Elrad  
(most recent semester first, **recommendations in red**, **changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

Fall 03 Sections - **CS441 All Sections** Instructor(s) - **Koutsogiannkis**

Student Count=**54** Assessment Count=**18**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**94%** N=**6%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**72%** N=**17%**  
N/A=**11%**

What did you like best about this course?

**topics(11); programming assignments(7); project(4)**

What, if anything, would you change about this course?

**more advanced topics needed(2); less quizzes/more assignments; too much programming(2); teaching more descriptive/visual/less code(2); distribute work more evenly over semester; book problems bad; too much for one semester**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**none at this time; next year as more students come through cs200/331 Java sequence; some of the basic concepts in CS441 can be eliminated; more time on more advanced concepts**

Fall02/Spring03 Corrective Action (on course)

**Starting Fall 2003 - CS115/116/200 switch to CS only, increased time and Java will influence future CS441; request updated course overview from course manager**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**course needs to be expanded to more than just "current topics in Java" to "current topics in programming languages"**

Spring 03 Sections - **CS441 All Sections** Instructor(s) - **Koutsogiannkis**

Student Count=**64** Assessment Count=**11**

Did you understand what was expected of you in the course? Y=**91%** N=**9%**

Do you think that you achieved the course goals for the course? Y=**100%** N=**0%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**91%** N=**9%**  
N/A=**0%**

What did you like best about this course?

**project(2)**

What, if anything, would you change about this course?

**more design freedom in programming assignments(1); change nothing(1)**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**more design freedom in programming assignments(1); change nothing(1)**

Fall 02 Sections - **CS441-001/091 & 071/251/390** Instructor(s) - **Koutsogiannakis/Bader**

Student Count=**46** Assessment Count=**15**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**100%** N=**0%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**80%** N=**13%**  
N/A=**7%**

What did you like best about this course?

**projects(6); references on WWW; informative homework(3); topics interesting/challenging(3); instructor(2); liked everything; programming examples; book; variety of topics(2); project**

Numbers in student comments represent number of student who made the comment

What, if anything, would you change about this course?

**more time for last project(2); spread material out(3); homework bad; writing code on board is waste of time; newer topics should be included; too much swing; more exceptions and container classes; add a lab component; more homework for practice**

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**none**

S02 Planned Course Enhancements

**o Update textbook to be less Java reference and more object-oriented theory based. Possible choice Czarnecki, K., Eisenecker, U. W., Generative Programming: Methods, Techniques, and Applications, Addison-Wesley, 1999.**

**o Update Catalog Description - Topics in programming language design such as concepts of abstract computing machines and virtual machines, Multithreading and distributed programming, garbage collector, even-driven programming, language framework for design and development of graphical user interface, and the supportive language constructs and mechanisms for the design and development of 3-tier software architectures. Current topics in programming languages such as issues in post object orientation approaches - Aspect Oriented Software Development. Prerequisite: CS 331 or CS 401 or CS 403. (3-0-3) (Fall 2002)**

**o The CS Undergraduate Committee is considering changing the introductory programming language taught to CS and CPE majors to Java in the near future and to stress problem solving and object oriented concepts more heavily. This change may effect CS441 as most of the first 5 "Major Topics Covered in Course" would be covered in pre-requisite classes which would present an opportunity for CS441 to contain more advanced theoretical topics.**

**o Review of CS441, CS445, CS447 for possible overlap, better transition, and increase in broader theoretical topics.**

**o Introduce more Aspect Oriented Software Development - After years of experience with object oriented programming and the advances in theory and applications of OO design and development it possible to identify the limitations of object orientation. "Post Object Orientation" approaches to software development that extend the basic ideas behind OO are quite mature. Aspect Orientation is emerging as an attempt to unify these new approaches. Scientific and industrial experiences are already available. The course will cover the areas where object orientation fails to adequately express separation of concerns and will cover the basic extension provided by aspect orientations. Applications to database, networking, concurrent and distributed programming, real-time application and electronic commerce will be presented.**

## Course Assessments

### CS445 - Object-Oriented Design and Programming Course Manager - Korel (most recent semester first, **recommendations in red**, **changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

Fall 03 Sections - **CS445 All Sections** Instructor(s) - **Hield**

Student Count=**44** Assessment Count=**16**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**94%** N=**6%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**100%** N=**0%**  
N/A=**0%**

What did you like best about this course?

**instructor(5); projects(3); topics/real world(5)**

What, if anything, would you change about this course?

**too hard/too much work(4); project work conflicts with exam; more time for final; starts too slow**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**less time on basic programming/compiling/debugging concepts and more time on analysis/design and OO fundamentals; more design patterns in depth**

Fall02/Spring03 Corrective Action (on course)

**Intro programming changes/improvements should help**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**pre-requisite programming skills not always up to par (could be undergrad vs. grad problem)**

Spring 03 Sections - **CS445 All Sections** Instructor(s) - **Hield**

Student Count=**50** Assessment Count=**3**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**100%** N=**0%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**100%** N=**0%**  
N/A=**0%**

What did you like best about this course?

**project(2)**

What, if anything, would you change about this course?

**more design freedom in programming assignments(1); change nothing(1)**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**more design freedom in programming assignments(1); change nothing(1)**

Fall 02 Sections - **CS445 All Sections** Instructor(s) - **Hield**

Student Count=**60** Assessment Count=**23**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**100%** N=**0%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**87%** N=**9%**  
N/A=**4%**

What did you like best about this course?

**instructor(5); O-O details(3); projects(practical, real world)(8)**

What, if anything, would you change about this course?

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**pre-req programming/debugging knowledge not good, OO concepts weak; spend more time on OO analysis and design**

## S02 Planned Course Enhancements

- o More extensive Design Pattern lectures are planned to incorporate more Design Pattern concepts in class. (Spring 2003)
- o The course projects will involve implementing selected Design Patterns so the students have both a theoretical understanding of these Patterns as well as the hands-on experience of working with them in code. (Spring 2003)
- o The CS Undergraduate Committee is considering changing the introductory programming language taught to CS and CPE majors to Java in the near future and to stress problem solving and object oriented concepts more heavily. This change may effect CS445 as most of the first 4 "Major Topics Covered in Course" would be covered in pre-requisite classes which would present an opportunity for CS445 to contain more advanced theoretical topics.
- o Review of CS441, CS445, CS447 for possible overlap, better transition, and increase in broader theoretical topics.

## Course Assessments

CS447 - Distributed Objects Course Manager - Bauer, M  
(most recent semester first, **recommendations in red, changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

**No Changes Recommended**

Fall 03 Sections - **CS447 All Sections** Instructor(s) - **Woyna**

Student Count=**32** Assessment Count=**6**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**83%** N=**17%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**100%** N=**0%**  
N/A=**0%**

What did you like best about this course?

**topics/real world(5); challenging(2); instructor(3)**

What, if anything, would you change about this course?

**too much material; relate better to project; offer every semester; increase CNS printing limits; instructor bad; book bad**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**Add Web Services (SOAP, WSDL, UDDI) to project**

Fall02/Spring03 Corrective Action (on course)

**no changes**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**none**

Fall 02 Sections - **CS447 All Sections** Instructor(s) - **Woyna**

Student Count=**23** Assessment Count=**5**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**100%** N=**0%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**80%** N=**20%**  
N/A=**0%**

What did you like best about this course?

**project(3); topics(3); instructor(3); difficult but rewarding(2)**

What, if anything, would you change about this course?

**more student interaction in lecture; add XML**

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**add Web Services (SOAP, WSDL, UDDI) to project**

S02 Planned Course Enhancements

**o Continuous integration of current and emerging trends in distributed systems, e.g. Web Services, Model Driven Architectures, Enterprise Application Integration**

**o CS Undergraduate Studies Committee Suggestions**

**§ Change title to more general so course can better adapt as theory and practice changes.**

**§ Identify new tenured/tenured-track Course Manager better suited to the topic.**

**§ Include details on alternative implementations of distributed object technology (i.e. RMI) and how to compare and choose best implementation for an application. Include topic on other approaches to distributed applications.**

**§ Review of CS441, CS445, CS447 for possible overlap, better transition, and increase in broader theoretical topics. Also consider how change to Java for introductory programming languages will affect these courses.**

Numbers in student comments represent number of student who made the comment



## Course Assessments

### CS450 - Operating Systems I Course Manager - Sun

(most recent semester first, **recommendations in red**, **changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

Fall 03 Sections - **CS450 Day & Night/Rice** Instructor(s) - **Dickens/Manov**

Student Count=**95** Assessment Count=**57**

Did you understand what was expected of you in the course? Y=**95%** N=**5%**

Do you think that you achieved the course goals for the course? Y=**75%** N=**25%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**95%** N=**5%**  
N/A=**0%**

What did you like best about this course?

**unix(11); topics(8); book; homework(4); quizzes(3); short exams; course flexibility; topics(13); assignments(3); UNIX/C programming(4); new algorithms; instructor(6); night class; topics; examples in class**

What, if anything, would you change about this course?

**better coverage of material/more in depth(5); book bad; more hands on OS work/labs(9); bad instructor(5); grading slow; too slow(2); need to have C programming as prereq(2); no word limits on exams; assignments unclear; use cs350 processors and develop OS; no TA grading exams; more/better real world applications(2); instructor discourages questions; exams ambiguous/objectively marked/bad(3); programming project/labs should be added(4); night class too long/add break(5); midterm exam before drop date; add embedded O/S applications; need more systems programming background; more advanced topics; too much homework**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**update for new edition of textbook**

Fall02/Spring03 Corrective Action (on course)

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**review textbook choice**

Spring 03 Sections - **CS450 All Sections** Instructor(s) - **Manov**

Student Count=**102** Assessment Count=**33**

Did you understand what was expected of you in the course? Y=**91%** N=**9%**

Do you think that you achieved the course goals for the course? Y=**91%** N=**9%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**88%** N=**12%**  
N/A=**0%**

What did you like best about this course?

**programming assignments(1); instructor(3); topics(3); web materials(1); organized/thorough(2); instructor/lectures(8); assignments relevant(2); topics(7); programming(5); exam structure(1); no need to attend(1)**

What, if anything, would you change about this course?

**change nothing(3); more programming examples(1); too theoretical/boring(1); state goals/expectations clearly(1); add h/w o/s interaction(1); most assignments did not support learning(1); time wasted in lecture(1); poor slides(1); hw due midweek, not Monday(1); more questions on exams so each not so heavily weighted(1); lectures more visual/not just from book(1); more on os design issues(1); more real world examples(2); change nothing(1); instructor poor(1); reduce content/increase depth(2); most assignments did not support learning(1); state goals/expectations clearly(1); more labwork without grading(1); more programming examples(1); exams ambiguous(1); bring back cs451(1)**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**change nothing(3); more programming examples(1); too theoretical/boring(1); state goals/expectations clearly(1); add h/w o/s interaction(1); most assignments did not support learning(1); time wasted in lecture(1); poor slides(1); hw due midweek, not Monday(1); more questions on exams so each not so heavily weighted(1); lectures more visual/not just from book(1); more on os design issues(1); more real world examples(2); change nothing(1); instructor poor(1); reduce content/increase depth(2); most assignments did not support learning(1); state goals/expectations clearly(1); more labwork without grading(1); more programming examples(1); exams ambiguous(1); bring back cs451(1)**

Fall 02 Sections - CS450-001/091/251 & 051/092 & 071 Instructor(s) - Sun & Manov

Student Count=125 Assessment Count=49

Did you understand what was expected of you in the course? Y=82% N=18%

Do you think that you achieved the course goals for the course? Y=82% N=18%

Were you adequately prepared to take this course by prerequisite computer science courses? Y=76% N=12% N/A=12%

What did you like best about this course?

**nothing(6); book(4); projects(2); unix; OS topics(2); nothing; topics(10); book; OSP projects(8); unix; book; topics(2); assignments/exams challenging; flexibility; instructor(2); easy course(2)**

What, if anything, would you change about this course?

**too difficult/too much work; OSP assignments too hard(5); cannot understand professor/reads slides doesn't teach(11); test was not on material covered/less echoing of book on answers(4); syllabus was not followed; book bad; TA to strict/not helpful(2); OSP assignments not worthwhile(2); instructor(4); too many assignments(6); too much UNIX background assumed(3); TA/instructor were not helpful(3); student interaction is low; more student interaction in lecture; change teaching style; more programming(2)**

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**none**

S02 Planned Course Enhancements

**o Include more O/S Programming Projects (see eliminated course CS451 for examples)**

## Course Assessments

### CS455 - Data Communications Course Manager - Wan (most recent semester first, **recommendations in red**, **changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

**No Changes Recommended**

Fall 03 Sections - **CS455 All Sections** Instructor(s) - **Soneru**

Student Count=**51** Assessment Count=**15**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**93%** N=**7%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**100%** N=**0%**  
N/A=**0%**

What did you like best about this course?

**topics(4); organized course(4); instructor(3); book(2); project(3); online lectures(2)**

What, if anything, would you change about this course?

**add more undergrad CS courses like this; project too hard; more hands on applicaitons(2); too much content at end; add peer-to-peer networks; remote broadcasting/internet limits instructor/makes boring; late in day classtime bad; more instructor/TA office hours; less programming emphasis**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**encourage live studnets to attend class regularly (too convenient with lectures/slides on www to stay at home); lack of direct/live interaction with instructor can be harmful**

Fall02/Spring03 Corrective Action (on course)

**request updated course overview from course manager**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**course needs to be reviewed; new textbook suggested; possible prerequisite problems**

Spring 03 Sections - **CS455 Day & Night** Instructor(s) - **Chlebus & Soneru**

Student Count=**59** Assessment Count=**35**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**91%** N=**9%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**91%** N=**6%**  
N/A=**3%**

What did you like best about this course?

**lectures/instructor(7); pace good(2); topics(4); starts from basics(3)**

What, if anything, would you change about this course?

**book does not match course(1); use slides(3); add hw from book(1); more hw(1); hw weighted more(2); too much material on each exam(1); more practical implementation of theory(1); too slow paced/add more topics(3)**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**book does not match course(1); use slides(3); add hw from book(1); more hw(1); hw weighted more(2); too much material on each exam(1); more practical implementation of theory(1); too slow paced/add more topics(3)**

Fall 02 Sections - **CS455-001 & 071/251/395/297** Instructor(s) - **Soneru & Choi**

Student Count=**67** Assessment Count=**16**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**100%** N=**0%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**94%** N=**0%**  
N/A=**6%**

Numbers in student comments represent number of student who made the comment

What did you like best about this course?

**instructor/lectures(7); notes online(2); lead time on HW good; topics(9); pace good**

What, if anything, would you change about this course?

**project not realistic(4); focus more on upper layer; more hands on work(4); too much theory homework(2); more interaction in class**

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**none**

S02 Planned Course Enhancements

**Major Course Redesign**

## Course Assessments

### CS470 - Computer Architecture I Course Manager - Bistriceanu (most recent semester first, **recommendations in red**, **changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

**Same as Instructor Comments**

Fall 03 Sections - **CS470 All Sections** Instructor(s) - **Bistriceanu**

Student Count=**24** Assessment Count=**17**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**71%** N=**29%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**88%** N=**12%**  
N/A=**0%**

What did you like best about this course?

**topics(9); lectures/instructor(7); examples; labs(2); TA**

What, if anything, would you change about this course?

**cs350/ece218 overlap(5); more content needed(2); project needed(2); book bad; labs 6/7 too big; instructor unclear; more sample problems done/hw solutions shown; hw returned too late; hw too hard(2); don't accept late labs**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**nothing**

Fall02/Spring03 Corrective Action (on course)

**review content overlap with cs350 and ece242**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**possible prerequisite problems**

Spring 03 Sections - **CS470 All Sections** Instructor(s) - **Bistriceanu**

Student Count=**33** Assessment Count=**26**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**77%** N=**23%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**100%** N=**0%**  
N/A=**0%**

What did you like best about this course?

**n/a**

What, if anything, would you change about this course?

**n/a**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**n/a**

Fall 02 Sections - **CS470 All Sections** Instructor(s) - **Bistriceanu**

Student Count=**48** Assessment Count=**0**

Did you understand what was expected of you in the course? Y=**n/a** N=**n/a**

Do you think that you achieved the course goals for the course? Y=**n/a** N=**n/a**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**n/a** N=**n/a**  
N/A=**n/a**

What did you like best about this course?

What, if anything, would you change about this course?

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**none**

## S02 Planned Course Enhancements

o Possible new course description - Understand the fundamentals of computing by studying the interaction between hardware and software at various levels. Discuss the design trade-offs that drive the performance of computer systems. Topics covered include Performance Definition, Instruction Set Design, Datapath and Control, Pipelining, the Memory Hierarchy, Input/Output systems. Prerequisite: CS 350 and ECE 218. (2-2-3)

o Departmental coordination is required to address existing some overlaps between cs350 and cs470 and to better define the objectives of cs350, cs470, and cs471. Interdepartmental coordination may be needed to address similar issues between cs350, cs470, cs470 and classes taught by the EE Department, e.g. ece218, ece242, etc.

o Planned enhancement on topics to be covered by CS470 (Fall 2002)

1. Overview and history of computer architecture 1 hour

2. Fundamentals of computer design 2 hours

3. Basic organization of a von Neumann computer 1 hours

4. Instruction Set design 2 hours

5. Datapath and Control 4 hours

6. Pipelining 5 hours

7. The memory hierarchy: Memory latency, cache organizations, virtual memory 4 hours

8. I/O: I/O performance measures, different I/O devices, major buses, I/O system addressing, latency in a I/O subsystem 4 hours

9. Multiprocessors 2 hours

Introduction: discuss class structure, objectives, and requirements, Midterm 3 hours

Project presentation 2 hours

Laboratory 30 hours

Final Exam -

Total 60 hours

## Course Assessments

CS485 - Computers and Society Course Manager - Bauer, C  
(most recent semester first, **recommendations in red, changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

**Same as Instructor Comments**

Fall 03 Sections - **CS485 All Sections** Instructor(s) - **Bauer, C**

Student Count=**38** Assessment Count=**31**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**100%** N=**0%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**97%** N=**0%**  
N/A=**3%**

What did you like best about this course?

**topics(7); instructor(7); short classes/easy workload(5); organized(3); presentation skills(4);  
interactive/teams(4); individual work**

What, if anything, would you change about this course?

**too many presentations(2); more ethics cases; teacher should present; make assignments due day of class;  
topics outdated; less teamwork**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**add more discussion of text**

Fall02/Spring03 Corrective Action (on course)

**no changes**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**none**

Spring 03 Sections - **CS485 All Sections** Instructor(s) - **Bauer, C**

Student Count=**38** Assessment Count=**35**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**100%** N=**0%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**91%** N=**3%**  
N/A=**6%**

What did you like best about this course?

**teamwork/group discussions/presentations(12); no studying/laid back(7); good assignments/topics(16);  
clear syllabus(3); fair grading(2); instructor(5)**

What, if anything, would you change about this course?

**change nothing(11); less ACM ethics(1); more teamwork(1); let us choose own groups(2); more legal  
rights/responsibilities(1); too many assignments(2); less group work(1); more meaningful(1); deadlines  
too strict(2); less group discussion/more lecture(1); too subjective/no feedback(3)**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**change nothing(11); less ACM ethics(1); more teamwork(1); let us choose own groups(2); more legal  
rights/responsibilities(1); too many assignments(2); less group work(1); more meaningful(1); deadlines  
too strict(2); less group discussion/more lecture(1); too subjective/no feedback(3)**

Fall 02 Sections - **CS485 All Sections** Instructor(s) - **Bauer, C**

Student Count=**39** Assessment Count=**36**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**100%** N=**0%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**92%** N=**0%**  
N/A=**8%**

Numbers in student comments represent number of student who made the comment

What did you like best about this course?

**social/ethical issues(3); instructor(6); easy pace/easy work(4); detailed syllabus(5); student presentations/websites(6); very hands on/participating(11); midterm; ACM ethics; grading policy(2); science fiction/writing(2); everything(2)**

What, if anything, would you change about this course?

**less HTML; some topics outdated/too broad(2); discuss more; too many assignments; less on ACM ethics**

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**more oral reporting; all submitted work should be PDF format**

S02 Planned Course Enhancements

**o Include topics on Professional Societies, Intellectual Property, Government Regulations, Industry Standards (Fall 2002)**

**o Review and assess the social and ethical issues of projects assigned in other CS courses. (Fall 2003)**

**o Replace “junior standing” pre-requisite with “COM421-Technical Writing (3 credit hours) or COM428-Verbal and Visual Communications” for students starting at IIT in Fall 2002 or later. COM421 or COM428 is replacing the non-technical elective in the BS in CS starting in Fall 2002.**



## Course Assessments

### CS487 - Software Engineering I Course Manager - Korel (most recent semester first, **recommendations in red**, **changes in blue**)

Fall03 Course Manager Recommendations on Course (not instructor)

Fall 03 Sections - **CS487 All Sections** Instructor(s) - **Wallace**

Student Count=**67** Assessment Count=**42**

Did you understand what was expected of you in the course? Y=**100%** N=**0%**

Do you think that you achieved the course goals for the course? Y=**93%** N=**7%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**86%** N=**2%**  
N/A=**12%**

What did you like best about this course?

**topics(10); group project(19); programming(2); instructor/lectures(7); organized(5); real world(5); easy**  
What, if anything, would you change about this course?

**more time for project(3); not real-world(5); dull(2); instructor; more exercises; too much memorization(3); more OO design; more teamwork; make it elective; too much note taking(2); groups difficult for remote students; more checkpoints for project/homework spread out more(5); textbook outdated;**

Fall 03 Instructor - If you were to teach the course again, what changes would you make?

**nothing**

Fall02/Spring03 Corrective Action (on course)

**request updated course overview from course manager**

Fall02/Spring03 Course Manager Recommendations on Course (not instructor)

**more object-oriented s/w engineering**

Spring 03 Sections - **CS487 All Sections** Instructor(s) - **Wallace**

Student Count=**89** Assessment Count=**57**

Did you understand what was expected of you in the course? Y=**98%** N=**2%**

Do you think that you achieved the course goals for the course? Y=**100%** N=**0%**

Were you adequately prepared to take this course by prerequisite computer science courses? Y=**95%** N=**5%**  
N/A=**0%**

What did you like best about this course?

**real world(17); goes well with cs445(1); lecture/instructor(13); teamwork/project(28); topics(12); pace good/organized(2); review sheets(1); book good(1)**

What, if anything, would you change about this course?

**too much documentation/busy work(12); change nothing(14); hard to choose team(1); more OO/UML(2); 2 projects so each student can be developer and tester(2); project too big(1); "B" grading scale goes to low ( $\geq 70$ ); stress deadlines more(1); should be more industry oriented/less theory/definitions(3); more database background needed(1); put notes online(1); smaller team should be OK(1); tests are too much memorization(2); bad course(1); should be choices for project(1)**

Spring 03 Instructor - If you were to teach the course again, what changes would you make?

**too much documentation/busy work(12); change nothing(14); hard to choose team(1); more OO/UML(2); 2 projects so each student can be developer and tester(2); project too big(1); "B" grading scale goes to low ( $\geq 70$ ); stress deadlines more(1); should be more industry oriented/less theory/definitions(3); more database background needed(1); put notes online(1); smaller team should be OK(1); tests are too much memorization(2); bad course(1); should be choices for project(1)**

Fall 02 Sections - **CS487-001 & 002/091/251 & 071/390** Instructor(s) - **Burnstein & Wallace**

Student Count=**127** Assessment Count=**76**

Numbers in student comments represent number of student who made the comment

Did you understand what was expected of you in the course? Y=99% N=1%

Do you think that you achieved the course goals for the course? Y=96% N=4%

Were you adequately prepared to take this course by prerequisite computer science courses? Y=86% N=7%  
N/A=8%

What did you like best about this course?

**nothing; everything; project(5); topics(4); instructor; real-world(4); homework; not much programming required; topics(19); team project(21); real-world(4); instructor/lectures(7); class structure/syllabus(2); not much programming required; final demo of work; database work**

What, if anything, would you change about this course?

**not relevant to real world; lectures too long/make interactive(4); too much work required(3); add UML/object oriented(4); book bad; less focus on exams; add event driven development(3); project not specified in enough detail/too confusing(7); too much work/documentation(15); database should be pre-req(3); add UML/object oriented(3); not real-world(3); get rid of group project/allow individual option(4); remote students don't get prompt feedback; more concepts on tests, not just keywords(3); TA grading consistency bad(3)**

Fall 02 Instructor - If you were to teach the course again, what changes would you make?

**none**

S02 Planned Course Enhancements

**none**