

OCCC Minutes
April 22, 1999
Western Oregon University

Presiding: Ed Wright

Attendees:

--- not given in the minutes received ---
--- does anybody have a complete list ? ---

Minutes of October 1998 meeting were approved.

1. What's new in CS around the campuses.

Central Oregon CC sent a 2-year CIS AA program to the state for approval. The University Center is still developing. - a dedicated building is coming soon. Oregon State has submitted a proposal for participation, but funding remains the critical issue. OIT has expressed interest, but is still working on getting the economics to pencil out.

Umpqua CC is having a good year with steady enrollment. The tech fee is helping with hardware upgrades and lab enlargements. Local job opportunities for program graduates are still lagging behind "production rate." Have tried a Java class -- I/O is the big hurdle. (My notes did not indicate any details of what problems with I/O might entail.)

Java teaching resources -- online text -- David Eck [sic] with lab manual, other instructor materials. Eck has a book, The Most Complex Machine, copyright 1995, 1-56881-054-7 (hardcover), that CENTRAL OREGON CC uses for CS121/122. The online text is linked on Ed Wright's page at WESTERN OREGON. The author is very responsive to suggestions and comments. Lewis and Loftus is being used for Java at WESTERN OREGON.

Oregon State enrollments are booming, actually overflowing their facilities. Math department is having trouble finding room for Mth231 courses. Mike has over 300 advisees; there are three other CS undergrad advisors. The new program options are improving retention.

Portland State offers Java for engineers, but it is not their main instructional language. CE & EE still insist on C++. Oregon State finds engineers want C for control structures, etc. Java supplements that for OOP concepts. Grad

feedback to Portland State indicates C++ and pointers are still important. Operating System classes still get heavily into pointers and their usage. At Oregon State, the desire is still to have the students know C, Java, and C++ -- the problem is how to fit it all in.

Classes are growing everywhere. CIS FTE at Portland CC is twice the next highest department (Math) which is the traditional FTE leader. Linn-Benton CC is turning students away. Multiple sections to accommodate growing enrollments implies multiple faculty teaching the same course which implies more effort needed to ensure consistency within a course number. University faculty tend to resist this on grounds of academic freedom but they are beginning to come around as they see disjoints occurring. Oregon State is working hard on a "standard platform" for course offerings -- finding it is very difficult to get agreement on "packaging" of C++.

Visual Basic is also growing rapidly in enrollment levels.

One approach to "standard platform" that Western Oregon is using is to have a common folder where labs, quizzes, and other materials are stored by all. Then faculty can build syllabi from that common pool and provide student links to the pool material. Portland State gives part-timers a standard packet that they all must use. Clackamas uses a lead instructor approach and direct part-timers as to topic coverage, plus giving them basic materials.

The C++ vs. Java debate at Western Oregon: Control advocates vs. end-result advocates may characterize the camps in a useful way. The debate is still open even in the language development community. The speed of hardware may settle the issue, at least with respect to relative performance of the two languages.

Regardless of the language, the topic list tends to remain the same. "Somebody still has to educate the songwriters" -- the foundation concepts still have to be transmitted. The group of students that doesn't actually need the details and internals is growing, but the others (who do) won't disappear. Portland State's perspective on this is that during the first two years students are building a toolkit for further use and development. All three languages (C, C++, and Java) are important -- debates there are on the order of presentation of the three. At present, the sequence is C++, C, then Java as 200-level electives. 400-level electives are more likely to win out because of the course load distribution.

2. Distance Learning.

Clackamas CC has about six classes now. Workload issues for instructors are

still unresolved. A questionnaire was distributed to meeting attendees asking about other campus practices regarding overload, course development, office hours, and so forth. Some schools have contract-based policies, others are re-examining and re-negotiating policies. Committee members were asked to answer based on what they would like to see.

OCCDE Consortium Host/Provider rules are still proving to be tough to deal with.

WEBCT used in conjunction with FrontPage is one product combination being used by Central Oregon CC.

Enrollment patterns: Clackamas finds many DL students are actually local and using the online class because of the asynchronicity aspect.

The question was asked whether any research is being done on the quality of work or student results when studying online vs. onsite. Portland CC has been tracking and analyzing this and have seen online classes doing better (at least initially) -- students tended to be more highly motivated. This seems to be dropping off as student enroll who expect it to be easier than taking the class onsite. Marty likes to do a class both ways because of the feedback loops it gives her.

Ed Wright was involved in the development of the PLATO system. This employs an open-entry, open-exit mastery-learning based approach. In-class courses are traditionally timeframe based. One error that may be happening is to force DL into the timeframe paradigm. Development has to be done totally in advance for DL. Compensation issues have to be treated in a non-traditional manner. Schools may need to separate instruction hours "purchased" from credits earned. This question gets into issues of governance and administration practice. Its resolution must involve both faculty and administration. The mastery of learning paradigm is very different from the in-classroom, time-rationed approach. Timely attention to interactive communications is important -- it is very time consuming for instructors who wind up working almost in tutorial mode. Portland CC limits enrollment in new DL course to 15, then raises that to 20 on second presentation, with the ultimate limit for further presentations held to 25.

Western Oregon commented that attempts to have unified course curriculum across schools might enable community colleges to share development effort and thus further commonality.

Umpqua is looking at texts that offer online support as part of the text. Lane is using some materials from the CTI website for CS120. Prentice-Hall has several such offerings in their booklist.

Oregon State had had to deal with flaming behavior in online environments. Standards of behavior may need to be enhanced to deal with online phenomena. Some of the inappropriate behavior may have to do with difficulties in adjusting away from deadline-driven patterns.

One technique some instructors use to deal with student interaction is FAQ files -- but this depends on the students' actually reading these. Instructors could filter messages and refer them to FAQ files as much as possible. Another approach is student cohort discussion groups, which are first arena for all questions and have a gatekeeper who is the only one authorized to forward questions to the instructor.

3. Course Numbers.

Portland CC requested numbers for networking courses -- a de facto change made at Portland CC -- mostly involves tagging letters on approved course numbers. These are Novell- and Microsoft-based courses (certification-related). Portland CC uses N and M suffixes to distinguish certification source. It was determined that these changes rate automatic approval by policy: suffix letters on course numbers are considered okay without statewide approval.

Portland CC also asked about desirability of a VBA course. Should it be a programming course (133-233-234) or would 235 be a better number, following a 125 -135-235 pattern? Umpqua uses 235 this way now. Central Oregon CC has a 235 - Advanced Software Applications. The group agreed to formalize use of 235, recognizing an established offering practice over a number of years.

Blue Mountain CC, Eastern Oregon U and Treasure Valley CC are working as a consortium to offer a multimedia course series. They need an intro course number for Intro to PhotoShop [Director] [Premiere]. The question being addressed there is where the courses should be housed, in MultiMedia, Art, or Computer Science? Should it be team-taught? The suggestion from the group was to check Portland CC's catalog of MultiMedia department offerings to check on approved MM course numbers.

Lane CC asked for approval of CS160 to serve as an intro course to the CS161, 162,260 sequence. It will be Intro to Programming, similar to the CS160 course at Oregon State. Clackamas CC has an Intro to Computer Concepts. Many schools' 122 courses deal with some of these issues - design methodology as much as implementation in a language. Oregon State's CS160 is called Orientation to CS - covering problem solving and some language exposure (MatLab, Maple, etc.) It was concluded that this proposal is a close

enough fit, although the recommendation was that the course be called Orientation to Programming.

Lane CC requested a 248 number for Essentials of Information Systems. It was asked how this would be different from the 244 Analysis course at Portland CC? Analysis would be a part of this new course, but only a part. Prerequisites would vary by major, from 125s to 160/161 to 179, etc. Does it overlap with BA231? What is its relationship to Portland State's ISQA300. Is this a 244 for non-majors or a predecessor to 244? This appears to be an accurate summary. The group agreed upon the number 243.

Oregon State talked about new directions their CS offerings are taking. There are now three concentration tracks within the CS degree. The new programs start in Fall of '99. It entails a BS degree with a CS option. Oregon State has an articulation table for all colleges that have submitted paperwork. New courses include CS252 - Principles of GUI and CS271 - Digital Logic, Assembler Language and Architecture. Related courses in other departments are ECE271, ECE275 and CS472. The Business school still offers their MIS major. The application to the CS professional program is done at the end of the sophomore year. All three tracks can do MECOP. Western Oregon offers a similar package, and OIT is working on a similar IT degree. WSU-Vancouver's new program is very similar to the new Oregon State triple track system. (Look at handouts and get details more accurate)

4. Fall Meeting Site and Date

Central Oregon Community College, Bend, the fourth week of Fall term, 22 October 1999.

5. CS120/121/122 Committee

No report has been prepared. Questions for all committee members: What should CS120 cover? CS121? CS122? Please send samples of Course Content Guides/Course Outlines to Ed and Ron.

6. Miscellaneous topics.

Java as a language for Intro to CS: Umpqua is using C++ and Java in separate sections of CS161.

At Western Oregon, CS161 is pure Brookshear, CS162 is Java, and CS260 is

Java & Data Structures. They are working to move Brookshear topics into a course similar to CS160, and use CS161 and 162 to teach Java, with Data Structures the complete focus of CS260.

OREGON STATE uses Java in CS161, CS162, and CS261 (a.k.a. CS260), and Java for translators. Most CC's are now doing CS161/162/260 in Java. C++ is used at Mt Hood CC, Portland CC, Portland State, and OIT. Umpqua uses both. Tim Budd of Oregon State now has his "C++ for Java Programmers" book out.

Southern Oregon has had an IS degree offering alongside CS for 10 years. IS/CIS is a big job-getter for students. Staffing losses are forcing retrenchment and some merger of CIS/CS. Some CIS courses that disappeared may survive in BA. Organized around CS and CIS/BUS minor (Systems Admin, Network, etc) Proposing to accept Rogue CC's Network Admin courses as a minor, less U D courses that are part of it. Has anyone else made arrangements to transfer Network Admin courses into a similar major?

Southern's CS department is uncertain about their administration's reception to en masse acceptance of a block of CC credits. The argument is that Southern can't afford to offer those. May need to include dual enrollment agreements, articulation agreements, and similar formal arrangements with the student. The University of Oregon/NCC articulation might serve as a model. UO's approach is reportedly to offer majors in various other schools with minors in CIS/CS, using new minor options that could go with BA, BIOLOGY, etc.

Western Oregon has Java labs on their website.

Oregon State is working on defining mastery levels for student achievement evaluation. Need to develop definitions of exposure, competency, mastery, etc. It was suggested that a collection of samples of mastery, etc would be good to have on a web site.

Portland State has a new accelerated course that combines CS161 and CS162 to prepare experienced non-C++ programmers for CS163 (a.k.a. CS260). It is offered as CS199 for now.

Textbook Comments.

Linn-Benton CC brought in Waite Group, Robert Lapore, "Data Structures" using Java with many applets on the CD. They solve all the "neat" problems so it is hard to find problems for the student. No problem sets or labs come with it.

Portland CC uses a Java text by David Wu from McGraw-Hill. It includes OOP

early on. A diagramming tool that matches the book is needed.

Western Oregon and Southern Oregon talked about industry demand for VB and this approach to teaching languages. There is lots of demand for VB programmers. Students with prior programming experience can learn VB very rapidly. Beginning students need to learn more than the GUI tools.

Symantec tools and JBuilder are now free to schools.

There was a (vigorous) debate about IDEs vs. prompt-level editors. DOS level work does introduce different perspectives on what the language compiler is really doing.

VB vs. Java commented on by Central Oregon, with respect to object components. One must handle object stuff very differently in VB than in other languages. VB offers poor object support, especially object hierarchies. Exception handling in VB is also different from other languages. The group consensus was: treat VB as a language for production work, not as a tool to study computer science.

CS133 texts were discussed.

Core Java vol. 1 is too voluminous. Does seem to help retention.

The Gittelman book from Scott Jones is much smaller, and seems to be quite adequate. It is intended for people with programming experience.

Lewis & Lofta has very good website labs.

Weiss has a Java version of Intro to Data Structures that has some math that can be skipped. Much analysis of algorithms.

Linn-Benton CC students seem to be going increasingly to Amazon.com and BarnesandNoble.com for texts rather than to the bookstore.

MCP (MacMillan) has an online bookshelf where you can keep up to five books.

Western Oregon has implemented a student login procedure that controls printer output, with a 1000 page per term limit.

www.BruceEckel.com has good C++ and Java books online such as Thinking in C++/Java. Material is in pdf and html formats.

It was suggested and concurred that it would be a good idea if the group began accumulating interesting links on the OCCC site. Submissions are encouraged.

The group adjourned on the conclusion that it had been a very pleasant and productive meeting, with extensive kudos offered to our hosts.

Respectively Submitted By ...

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Please notify [Ron Wallace](#) by email of any updates or corrections.