Computer Information Technology
Lane Self Study 2004
Chapter 0 - Alignment

Core Values

Learning

Creating a learner-centered environment:

- Curriculum continually updated with changing industry and new needs
- Service oriented classes in addition to Professional-Technical and Transfer
- Curriculum committees – i.e. Networking organized with lead, includes all stakeholders
- Tightly integrated with COOP to optimize the student's experience
- Distance learning offerings; Telecourse, Online
- Create facilities and projects as currently used in the community
    - Hardware – routers, switches, hubs, wireless
    - Software – operating systems, development tools, applications
    - Group/team projects and assignments
    - Web oriented projects
- Materials – lecture notes, etc. accessible on Web servers
- MSDNAA alliance to enable students to have latest versions of software for free

Recognize and respect the unique needs and potential of each learner:

- Emphasis "hands on" using bench labs and teaching labs
- Respect needs of diverse students – accommodate range of needs
- Lecture/lab mode emphasizes "hands on" experience in addition to lectures
- Encourage student directed learning

Foster a culture of achievement in a caring community:

- Project-based and small group learning techniques used
- Vocationally oriented – focus on jobs – practical orientation – help find work
- Tutoring services – support through office hours, open labs, etc.
- Student evaluation of Instruction used for student feedback and improvement
- Peer evaluations of teaching
- Mentoring system for PT faculty – connected to contracted who teach same course
- Provide scholarships and assist students with outside support
- Dialogue with students on email
- Bring in community members to lecture in areas of expertise
- Students very goal oriented – faculty recognize achievements of students

Diversity

Promote Diversity among staff, students, and our community:

- Lane County Fair booth; recruit nontraditional students
- Career Day table; recruit potential students from entire community

Cultivate Respectful, Inclusive, and Accessible Learning Environment:

- Range of preparation styles, experiences, and cultural background – use variety of techniques to make materials accessible to students
- Make every student feel they can succeed – create an environment of success
- Open lab contains all necessary equipment and resources to complete courses – all hardware, etc. for diverse needs, especially ADA challenges (screen reader, speech recognition, etc)
- Make every attempt to respond one-on-one to student needs

Serve Educational Needs of Diverse Community:
- With Women's Program – work on accessibility for female students
- Mentorship program: with Women in Transition Program

Develop Capacity to Understand Diversity Issues:
- Faculty work on their own cultural competence i.e. workshops, etc
- Articles to Community College "Moment" – diversity issues, themes (i.e. Digital Divide)
- Participate in college wide shared readings on diversity

Innovation

Support creativity, experimentation, and institutional transformation:
- Early adapters of Instructional Technology
    - Laptops
    - Small groups
    - Distance learning
    - Internet
    - Bench labs
    - Interactive whiteboards
- Faculty participation in the League for Innovation activities
- Attend League of Innovation's Conference on Information Technology
- Participation in college wide innovation committees of the Strategic Learning Initiative
- Support of the Banner Administrative System Implementation
- Active participation in TACT
- Foster an open participatory culture that fosters change adaptation

Respond to technological and demographic changes:
- Assess and meet current standards used in business and the community
- Work with Advisory Committee and business community to identify needs
    - Survey current business practices and platforms
    - Review program curriculum with Advisory Committee members

Anticipate and respond to internal and external challenges in a timely manner:
- Constantly update curriculum
- Staff and manage all CIT labs, so we can quickly be responsive to needs

Act courageously, deliberately, and systematically in relation to change:
- Aggressively improve infrastructure to support instructional needs
    - Network devices
    - Bandwidth
    - Bench labs
- Membership in national and regional computing organizations

- ACM
- IEEE – Computer Society
- Software Organization of Oregon (SOA)

Collaboration and Partnership

Promote meaningful participation in shared governance:

- Campus wide governance committees – characteristic of staff involvement
- Advisory Committee participation
- Student member on Advisory Committee
- Department charter reflects a tradition of shared decision making
- Fall, Spring In-service planning committees
- Student Module – support Banner implementation
- Active participation in Faculty Council

Encourage and expand partnerships with organizations and groups in community

- COOP Ed
  - connections to community organizations
  - providing support through student placement
- Support of Mobility International
- On campus support for technical needs, consulting, etc.
- Respond to job search requests from local employers
- MSDNAA partnerships – equipment resource for students
- Faculty member serves as LCC Web Master
- Encourage student involvement in campus and community organizations
- Provide service classes for Transfer, Pre-Engineering, Multimedia Arts, e-Business, and other academic programs on campus

Integrity

Foster an Environment of respect, fairness, honesty, and openness:

- Student Code of Conduct
- Fostering respect and openness – dealing with a wide diversity of students
- Student access to Instructors and Division Chair

Promote responsible stewardship of resources and public trust:

- Strict policies on lab use to protect equipment, software licensing, etc.
- Physical environment controlled through restraints, locks, etc.
- Monitor class enrollments to maximize enrollment potential
  - cancel classes when necessary
- Future scheduling plans based on current enrollment data
- Students are active in protecting lab resources
- Make every attempt to recycler materials
- Careful consumption of supplies

Accessibility

Strategically Grow Learning Opportunities:

- Curriculum update – strategically to make sure necessary and appropriate for student/program needs
- MSDNAA – makes software programs available
- Statewide distance learning consortium

Minimize barriers to Learning:

- Students only pay lab fee once per term
- Provide wide range of open lab hours and class times
    - Including evenings and weekends
- Utilize Community Learning Centers (CLC)
- Offer Teleweb and Online courses
    - reach a wider audience of learners
    - make classes available to students with time or distance constraints
- Materials for courses available on Web

Chapter 1: Unit Description

Who are you?

Answer this question by providing the following information

- **Unit Mission/Vision**

  Computer Information Technology (CIT) Department is organized as a work unit to support the mission of providing a quality learning experience in a caring environment. We intend to promote these objectives:

  1. foster a quality teaching and learning environment
  2. provide opportunities for staff leadership in educational programs and reform
  3. promote fair and balanced work group decision making processes
  4. enhance the efficiency and effectiveness of the CIT department's programs and the College's operation.

  The CIT Department provides professional technical degree programs, certificates of completion, lower division college transfer courses, and service courses to other departments and degrees on campus.

- **Catalog Description**

Computer User Support

Purpose - To prepare graduates for entry-level positions that provide technical support, assistance, troubleshooting, training and documentation to computer end users. Positions include User Support Specialist, Customer Support Representative, and Software Trainer.

Computer Programming

Purpose - To prepare technicians for entry-level positions as computer programmers, web developers or database application developers.

Computer Network Operations

Purpose - To train entry-level network support technicians and administrators in specific computer networking skills and general troubleshooting of hardware and software related problems.

Computer Applications Specialist

Purpose - To prepare specialists in the use of computer information systems. Specialists use a computer's capabilities as a problem-solving tool for positions that require end-user knowledge of computer hardware, software, and operating procedures.

- **History/Significant Program Events**

  In 2001 the Computer Information Technology Department was recognized as a separate division as the result of a major college reorganization process. In 2003 the Business Technologies Department and the Computer Information Technology Department were organized under a single Division Chair.

- **Degrees and Certificates**

  - Two-Year Associate of Applied Science Degree
    AAS in Computer User Support
    AAS in Computer Programming
    AAS in Computer Network Operations

  - One-Year Certificate of Completion
    Certificate in Computer Applications Specialist

  - Direct Transfer Degree
    Computer Science
    Computer Engineering

  - Cooperative Education
    Computer User Support
    Computer Programming
    Computer Network Operations

- **Organizational Structure**

  The departmental administrative staff and faculty report directly to the Division Chair.

- **Staff/Faculty**

  The Computer Information Technology Department has a 1.0 FTE classified Administrative Support Specialist position, 8 1.0 FTE contracted faculty positions (one of which gets 2/3 release time to coordinate departmental lab facilities), and 10 – 12 part time faculty positions.

Chapter 2: Program Outcomes (Curriculum)

What does your program intend to do? What does the learner acquire after completing your program? How does you program contribute to enhancing the core abilities (as defined in the catalogue) of the learner?

- Program Level:
  - Program Outcomes

Computer Network Operations Degree

Learning Outcomes The graduate will:

- administer an organization's computer network infrastructure including servers, workstations, printers, and routers and other internetworking devices.
- monitor network performance, troubleshoot network problems.
- understand fundamental networking theory, terminology, and industry recognized standards.
- use appropriate library and information resources to research network management issues and tools and support lifelong technical learning
- interpret the concepts of a computer network related problem-solving task and translate them into mathematics

Computer Programming Degree

Learning Outcomes The graduate will:

- write desktop, client/server and web based computer programs using a variety of current tools and technologies.
- understand the relationship between computer programs and organizational processes.
- analyze a software related problem and design an appropriate solution.
- interpret the mathematical concepts of a programming related problem-solving task and translate them into programming logic and expressions
- use appropriate library and information resources to research programming tools and technologies and support lifelong technical learning

Computer User Support Degree

Learning Outcomes The graduate will:

- set up, install, configure, and troubleshoot hardware.
- install, configure, upgrade, maintain, and trouble-shoot software.
- solve problems using recognized problem-solving methods.
- write and edit user documentation.
- prepare training materials and train end-users.
- administer and support computer networks.
- assess user needs and recommend computer solutions.
- perform computer facilities management tasks.
- use appropriate library and information resources to research user support and help desk issues and tools and support lifelong technical learning
- interpret the elements of a problem-solving task and translate them into mathematics
- collect and display data as lists, tables, and graphs
- translate tasks into mathematical formulas and manipulate the formulas and variables

Computer Applications Specialist

Learning Outcomes The graduate will:

- have a broad range of skills necessary to be an effective user of information systems.

- have core skills in the use of computers, as well as related skill areas: business, mathematics, writing, and the social sciences.
- have specialize skills in one of three areas of emphasis: accounting systems, end-user computing or technical documentation.
- use appropriate library and information resources to research software application issues and tools and support lifelong technical learning
- interpret the elements of a problem-solving task and translate them into mathematics

- Program accreditations/national standards if applicable

  Computer Information Technology courses CS161 and CS162 follow the recommended national guidelines from the Association of Computing Machinery (ACM) for Computer Science1 and Computer Science 2 curriculum. We also communicate and cooperate at the state level by following guidelines developed by the Oregon Colleges Computer Chairs (OCCC).

- Core Ability Outcomes
  - communicate effectively.
  - think critically and solve problems effectively.
  - increase understanding of the relationship between self and community, including self-awareness, personal responsibility, and the development of cultural competence.
  - explore academic disciplines.

➢ Course Level:

- Course Outcomes

- Instructional Methods

- Instructional Environment (classroom type/technologies)

➢ Faculty/Staff Contributions

Faculty in the Computer Information Technology Department define the degree program outcomes with input from a variety of sources, including: the CIT Advisory Committee, faculty within the CIT department, faculty from other departments on campus, faculty and administrators from other institutions, and students.

➢ Advisory Committee

The Computer Information Technology Advisory Committee makes active contributions to our programs, meeting three times each year. The committee is made up of community/industry members, faculty, and a student. The curriculum for each program is reviewed annually and recommendations are made on improvements to the programs. These recommendations are often in the form of the knowledge, skills, and abilities that students will need to be viable candidates for employment.

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STRATEGIC DIRECTIONS

Financial Stability

- Operated CIT Department within allocated budget
- Controlled material and supply costs to stay within budget
- Operated all part-time section classes using Tuition-Based model

Building Organizational Infrastructure

Participation in college-wide councils and committees:

- Faculty Council
- LCCEA
- Curriculum Requirements Committee
- Curriculum Approval Committee
- Facilities Management Committee
- Safety Committee
- College Governance Process
- TACT
- Banner Student Core Team
- LIMT (LASR Implementation Management Team)
- Self-Study Steering Committee
- Standard 8, 4 Self-Study Committees
- Science Division Chair Hiring Committee
- Continuing Education Director Hiring Committee

College Climate

- Coordinate efforts with other departments on campus:
    - Business Technology
    - Multimedia Arts
    - Graphic Design
    - Energy Management Program
- Collaborate with Disability Services to create productive environment for students
- Create collaborative efforts with Instructional Computing
- Create collaborative efforts with Women's Program
- Increased tutoring hours available to improve student success

Implementing BWEL Reorganization

- Participating in CIT & BT & BWEL relationship discussions and proposals
- Discuss issues to link CIT credit with non-credit classes
- Discuss software certification issues between CIT and Continuing Education
- Faculty that teach CIT and non-credit classes