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AUTHOR Hutcheson, Polly, Ed.

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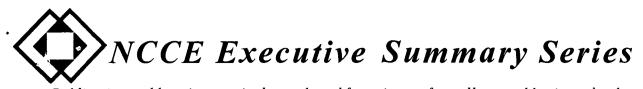
ABSTRACT

This report highlights the various strategies used to relate cooperative education (CE) work experience to students' academic programs by profiling 17 colleges and universities that are members of the National Commission for Cooperative Education's College Partner Program. Each profile includes a brief statement from the institution's president; describes the orientation procedures for students entering the CE program; notes how the institution recognizes participation in the CE program; describes integrated learning mechanisms used; and explains new or special procedures related to the operation of the CE program. Each profile also includes basic data on the program, such as contact information, total institutional enrollment, length of term for the CE experience, year CE program was established, description of program structure, CE enrollment, program fees, minimum and maximum number of CE terms possible, student selection criteria, number of CE employers, and earliest term students may participate in the program. A glossary of program characteristics is included. Additional information is provided on an accompanying computer diskette. (MDM)

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Publications addressing curricular and workforce issues for college and business leaders

Number II

June 1999

Cooperative Education:

Institutional Profiles of Integrated Learning

Antioch College

Auburn University

California State University - Fresno

California State University - Sacramento

County College of Morris

Dowling College

Hocking College

Holyoke Community College

Johnson & Wales University

Kean University

Miami-Dade Community College

Michigan Technological University

Naugatuck Valley Community - Technical College

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National Commission for Cooperative Education



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Preface

Cooperative Education: Institutional Profiles of Integrated Learning, Number II, is the second issue of the NCCE Executive Summary Series – National Commission for Cooperative Education (NCCE) publications addressing curricular and workforce development issues for college and business leaders. The series provides concise overviews of topics related to postsecondary cooperative education and its connections to other strategies that enhance education and workforce development through the integration of work and learning. This second issue of institutional profiles was printed for the NCCE Corporate Symposium, The Talent Search: Competing for a Highly Skilled & Diverse Workforce, held in June 1999 in Cambridge, MA. The Symposium, cosponsored by Camp Dresser & McKee, is one of NCCE's on-going activities to build constructive dialogue and action among business, education and government leaders.

The National Commission for Cooperative Education is dedicated to advancing quality cooperative education throughout the United States. Since 1962, NCCE and its college and business members have supported the development of quality work-integrated learning programs through national advocacy, executive outreach, public awareness, the Student and Parent Response Center, research and education. The NCCE Board of Trustees is composed of college presidents, industry executives and representatives from labor, government, and national organizations.

This second volume will join volume I in the federal Educational Resources Information Center's (ERIC) Clearinghouse on Higher Education. The seventeen colleges and universities included in this profile are members of the NCCE College Partner Program. This program, along with the NCCE Corporate Partner Program, provides a forum to link the presidents of colleges offering cooperative education with industry executives and national organizations. We invite you to review the institutional profiles and to engage in collaborative partnerships to maximize the benefits to students, educational institutions and employers. Since 1906, college cooperative education has been an effective educational strategy integrating rigorous academics with paid, progressive work experiences related to a student's academic and career goals. We look forward to the expansion of this strategy within higher education, and to the enhancement of linkages among all levels of education.

We would like to thank the College Partner presidents and cooperative education practitioners who assisted in the development of this publication. Additionally, we welcome your recommendations for other topics for survey or analysis in the NCCE Executive Summary Series.

Polly Hutcheson Vice President, NCCE Editor, Institutional Profiles

Paul J. Stonely President, NCCE



Introduction

What is Cooperative Education

College cooperative education (or "co-op") was established in 1906 as an academic strategy that integrates classroom studies with a series of paid, productive work experiences in a field related to a student's career or education goals. Since its inception at the College of Engineering at the University of Cincinnati, cooperative education has expanded to nearly 900 colleges and universities, and is offered in a wide variety of disciplines. Co-op is found at community and technical colleges, liberal arts colleges, research universities and graduate programs. Each year, nearly 200,000 students participate in co-op, enhancing their academic curricula by working for one of the approximately 50,000 co-op employers throughout the country or abroad. These employers include multi-national corporations, small entrepreneurial businesses, government agencies, and nonprofit organizations. Nearly 85 percent of the top 100 of the Fortune 500 List employ students through college co-op programs. With the growth of education reform and initiatives to increase the integration of work and learning for all students—both secondary and postsecondary—college co-op will be an important partner in building a comprehensive system of education and training that promotes student success in education, in careers, and in lifelong learning.

Focus of this Survey

Both volumes of the *Institutional Profiles of Integrated Learning* highlight the strategies used by colleges and universities to relate the co-op work experience to the student's academic program. This study arose from discussions among college presidents about the means by which institutions optimize the integration of the co-op work experience with the classroom curriculum.

While this publication does not provide an assessment of the learning strategies included, the profiles can be a starting point for benchmarking, exploring new methods to link work experience to a student's academic program, or indicating areas for research. There are a number of commonly-used structures such as orientation sessions, learning agreements and evaluation forms. Beyond those, learning strategies vary among institutions and sometimes among departments within an individual college or university. There are also variations in the required or optional nature of the learning strategies. A number of the colleges profiled have an organized, structured set of criteria and mechanisms to assist students in the learning process. Some institutions are also exploring new ways to enhance the assessment of the outcomes for students. Several mention the impact of ABET 2000 (from the Accrediting Board for Engineering and Technology) and its emphasis on long-range outcomes. An expanded exploration of assessment means and effectiveness would assist co-op and other work-based learning programs in building strong, academically-integrated curricula.



Institutional Profiles

In keeping with the executive audience, each entry includes a statement from the president, addressing the particular opportunities and challenges facing cooperative education, either on his or her campus or in the broader environment. College entries are concise and offer an overview of orientation and integration strategies. To assist in comparison of institutions and of operating characteristics, you will find a brief profile of the co-op program characteristics. There is also contact information should you wish to explore that college's program further. Please consult the glossary in this publication for an explanation of terms included in the co-op program information section.

Institutional Profile Terms

<u>Program Orientation for Co-op</u>: The orientation procedures for students coming into the co-op program. In most cases, there is an indication as to which procedures are required, as opposed to recommended or optional.

Institutional Recognition of Co-op: The ways by which the institution recognizes participation in co-op. The varied forms of recognition include: academic credit that counts towards the required number of credits for a degree; academic credit that does not count towards the degree; mandatory or required participation that is considered a part of the degree requirements without separate academic credit; and transcript notations that ensure that the participation is a part of the student's permanent record, regardless of whether or not credit is awarded. Historically, the institutionalization of co-op work experience into the curricula has proven more important as a measure of linkage, regardless of whether or not academic credit is awarded.

<u>Integrated Learning Mechanisms</u>: Measures to enhance the student's integration of the co-op work experience into classroom studies. These may include learning agreements, course requirements, assessment mechanisms, the interaction of teaching faculty with the co-op program, and the less formal connections among students, teaching faculty and co-op coordinators.

New or special procedures related to the operation of co-op programs. Since all of these colleges offer many common procedures, co-op directors were asked to list only those that are new or represent additional linkages to high schools and employers (beyond those that all programs use to effectively recruit and serve their student, college and employer constituencies). STW refers to School-to-Work projects or partnerships developed under state or federal STW initiatives.



Glossary of Program Characteristics

Co-op Program Information: The institutional and structural characteristics of cooperative education programs at each institution.

Co-op Students: The total number of students engaged in cooperative education employment during the year of the survey. Programs typically work with a larger group of students who are considering co-op, who are preparing for their first work experience, or who have completed one or more work terms but continue to interact with the co-op coordinator. In these profiles, co-op students refers to "unduplicated" students, meaning that each student is counted only once even though he or she may have participated in more than one co-op work period during that year. For instance, a student may have worked during the summer, returned to school in the fall, and worked again during the spring term. That student would be counted only once in this data.

Co-op Employers: The number of employers who actually hired one or more co-op students from that institution during the year of the survey. College co-op offices typically have a larger listing of employers who might have available positions during a given year.

Co-op Periods: The length of an individual term during which a student may be on a co-op work experience. Institutions vary in quarter, trimester and semester systems, and they may have a different length of time over the summer. The length of available work time may be significant for employers in their planning.

Fee: A separate fee for participation in co-op or for the services of the co-op office. An entry of "None" indicates that there is not a separate fee for co-op, although students may be paying general tuition or tuition for the credits awarded.

Co-op begins: The earliest term in which a student is typically eligible to participate in co-op.

Co-op established: The year in which the college first established a co-op program.

Min/max terms: The minimum and maximum number of terms that a student must, or may be able to, participate in co-op.

Characteristics: Structural descriptors of the co-op program, including mandatory (required) participation, optional participation, and alternating or parallel scheduling. Alternating—students alternate periods of full-time attendance in academic classes with periods of full-time employment in positions of educational value approved by the institution. Parallel—students attend classes for a segment of the day, and work for a segment of the day, at a position approved by the institution. Students typically work 20 hours/week in a parellel program.

Selective criteria: Requirements for participation in cooperative education that may include academic standing, a minimum grade point average, prerequisite courses, etc.

Academic divisions: The departments or colleges that offer cooperative education as a part of their curriculum.



Antioch College Yellow Springs, OH

Antioch College is unique in approaching cooperative education as an integral part of liberal arts education and in placing the integration of work and study at the center of its curriculum. Work experiences contribute to the growth of the whole person, and provide students with opportunities to challenge their values and perspectives, while providing life and work experiences which develop independence, confidence and self motivation. In addition to involving students in jobs in many sectors of the economy, Antioch's Co-op program provides opportunities for service learning, internships, apprenticeships, cross-cultural experiences -- the full range of off-campus experiential and multi-cultural learning opportunities.

Mr. Robert H. Devine President

Program Orientation for Co-op

Students participate in group orientation sessions. Workshops are held for topics such as resumé and application writing. Students meet at least four times with their co-op faculty advisors during their first term. Prospective students visiting the campus meet with a co-op faculty member.

Institutional Recognition of Co-op

Co-op is required of all degree seeking students. College degree requirements include 60 co-op credits and 107 academic credits. Each co-op is 12 credits. Students must complete one or two major related co-ops, depending on their major.

Integrated Learning Mechanisms

- Co-op swap sessions are sponsored in conjunction with the majors.
- A co-op faculty advisor and an academic faculty advisor are assigned to each student.
- Learning objectives are established by students as a requirement for registration for co-op. They reflect on these objectives in their co-op papers and during crediting conferences.
- Evaluations are completed by employers and students which become part of each student's permanent record.
- Co-op faculty and classroom faculty have been collaborating on creating classes, workshops, and seminars to help students prepare for co-op.
- Co-op faculty meet regularly with each of the interdisciplinary major boards. Inclusion of co-op learning in classes varies across disciplines.
- The Director of Co-op is included as a member of the Academic Program Committee which also includes the Major Chairs.
- All new faculty learn about co-op as part of the new faculty orientation.

New/Special Administrative Practices

- Students have access to the co-op job list on the college web page. They can also register on-line or print needed forms from the webpage.
- Registered co-op students receive a stipend for transition costs.

Special High School/Employer Outreach

 Co-op faculty conduct high school recruiting during regularly scheduled visits to students.

CO-OP PROGRAM INFORMATION: Susan Eklund-Leen (937) 767-6307

Institutional Enrollment: 615 (581 FT)

Co-op Students: 505

Co-op Employers: 160

Co-op periods: 16 weeks

Co-op established: 1921

Fee: None, tuition

Co-op begins: 3rd term for 1st yr/2nd term for trans.

Characteristics: mandatory & alternating

Selective criteria: none

Min/Max terms: 5 work experiences min.

Academic & Interdisciplinary Divisions: Arts; Cultural & Interdisciplinary Studies; Environmental & Biological Sciences; History, Philosophy & Religious Studies; Languages, Literature & Culture; Physical Sciences; Self, Society & Culture: Social & Global Studies



Auburn University Auburn, AL

Cooperative education is central to Auburn University's educational mission, as it is our objective to give our students as many opportunities as possible to apply the knowledge they learn in our classrooms.

Dr. William V. Muse President

Program Orientation for Co-op

There is a required orientation (two 1-hour meetings) on job search and workplace skills, and an optional interviewing tips seminar. Students meet with coordinator, have resumé approved and sign up for interviews. Before going out on co-op, there is a final 1-hour meeting on workplace skills and success.

Institutional Recognition of Co-op

No academic credit is awarded. Co-op is noted on the transcript for each work term. A co-op diploma is awarded in addition to the academic diploma.

Integrated Learning Mechanisms

- Learning plans are developed by the student and co-op counselor, and are approved by the academic advisors.
- Academic advisors meet with students to approve the co-op assignments.
- Evaluations are completed by the supervisor and the university's co-op coordinator.
- Work Summaries are completed by students, describing the tasks performed and how the work experiences fit into the academic program.
- Department heads receive copies of work summaries, bound by majors.
- Co-op director serves on ad hoc committees on campus.

New/Special Administrative Practices

• The university is moving from a quarter to a semester system by Fall 2000. The co-op director chairs the university committee on the co-op component of the transition.

CO-OP PROGRAM INFORMATION: Kim Durbin (334) 844-5410

Institutional Enrollment: 22.000 (17,963 FT)

Characteristics Octional at

Characteristics: Optional, alternating Co-op established: 1937

Co-op Students: 1179
Fee: \$30 (registration fee)
Selective criteria: 2.2 g.p.a.

Co-op Employers: 295 Co-op begins: fresh, 3rd qtr; Jr.

Min/Max terms: 4 min, 7 max.

Academic Divisions: College of Agriculture; College of Architecture, Design and Construction; College of Business; College of Engineering; School of Forestry; College of Liberal Arts; College of Sciences and Mathematics



California State University-Fresno Fresno, CA



Fresno State is strongly committed to an experientially based undergraduate experience. We consciously seek to develop cooperative education experiences in all of our academic programs. Students who participate in these experiences are more likely to finish their degree and feel more positively about their educational experience.

> Dr. John D. Welty President

Program Orientation for Co-op

Students register for a co-op class with a faculty member. Optional interviewing and resumé seminars are offered.

Institutional Recognition of Co-op

1-12 credits are awarded, varying by the department allowing the units. 3 units of credit usually counts towards the degree.

Integrated Learning Mechanisms

- Faculty advisor approves the work experience.
- Learning mechanisms vary by school and department.
- Credit for co-op is awarded by faculty.
- **Professional report** is completed by the student.
- Evaluations are completed by the student and employer.

New/Special Administrative Practices

- Co-op office is integrated within Career Services.
- Flexible operation allows non-credit co-op.

Special High School/Employer Outreach

University outreach begins with the pre-high school level. The university also targets the large multicultural population in the surrounding area.

CO-OP PROGRAM INFORMATION: Caroline Williams (559) 278-2381

Institutional Enrollment: 18.000 (15.290 FT)

Co-op periods: 3-6 months

Characteristics: Mandatory & Optl; Alt. & Parallel

Co-op established: 1981

Selective criteria: 2.0 g.p.a. Min/Max terms: 1 semester min.\4 semesters max.

Co-op Employers: 150+

Co-op begins: sophomore, 1st semester

Academic Divisions: Agricultural Sciences & Technology; Arts & Humanities; Business; Education & Human Development;

Engineering & Computer Science: Health & Human Services: Natural Sciences; and Social Sciences



Co-op Students: 550 Fee: None (tuition for credits)

California State University-Sacramento Sacramento, CA

Cooperative Education is an important part of the Strategic Plan for California State University, Sacramento. The University seeks to increase opportunities for CSUS students to engage in experiential learning. Co-op is the primary source of experiential learning at CSUS. Since the Co-op Program was expanded to serve the entire campus in 1992, growth in the program has been dramatic, reaching over 600 student placements last year. This makes CSUS's Co-op Program the largest in California.

Cooperative Education enhances the University's instruction by adding "learning by doing" to its pedagogical tools. Co-op students begin early the process of applying theory to practice, thus forging graduates tempered in reality and grounded in the traditions of higher education.

> Dr. Donald R. Gerth President

Program Orientation for Co-op

There is a required one and one-half hour Cooperative Education Information Session. They also offer optional workshops on job search skills. Students meet with the co-op coordinator in their major. The application process includes resumé development, faculty recommendation, co-op application and interview.

Institutional Recognition of Co-op

3 - 12 credits are awarded. Depending on the department, credit may count towards the degree. Students receive a transcript notation and a Certificate of Cooperative Education.

Integrated Learning Mechanisms

- The university's Strategic Plan includes co-op.
- Required co-op technical article is evaluated by faculty.
- Evaluations are completed by the student (on the learning experience) and the employer.
- Work site visits are conducted when possible.
- Credit is awarded through faculty evaluation.

New/Special Administrative Practices

- The Co-op Office and the Office of Community Collaboration (service learning) work in concert.
- The university is untilizing web-based services for students and employers.
- Co-op and MESA (Math, Engineering & Science Achievement) programs collaborate on Project Success to link incoming freshmen with employers for fellowships and summer and vacation experiences prior to eligibility for co-op.

Special High School/Employer Outreach

Co-op staff participate in informational workshops for high school teachers and counselors.

CO-OP PROGRAM INFORMATION: Larry Hill (916) 278-5135

Institutional Enrollment: 24,000

Co-op periods: 12 weeks: 24 weeks

Co-op Students: 601

Co-op Employers: 300

Characteristics: Optional. alternating & parallel

Fee: None (tuition for credits)

Co-op begins: Junior, 1st semester

Selective criteria: 2.5 g.p.a., faculty recommendation Min/Max terms: 1 min; 4 max

Co-op established: 1986

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Academic Divisions: Arts & Letters; Business Administration; Education; Engineering & Computer Science: Health & Human Services; Natural Sciences & Mathematics; Social Sciences \$ Interdisciplinary Studies



County College of Morris Randolph, NJ

Cooperative Education has been an important part of the CCM curriculum for over 25 years. We consider it to be a win-win-win opportunity for students, faculty and employers. Students clearly "win" by gaining hands on experience in their chosen fields, faculty "win" by interfacing with employers and gaining insights into "real world" work environments, and employers "win" by adding fresh ideas and approaches to their workforce.

Dr. Edward J. Yaw President

Program Orientation for Co-op

Students complete application. Co-op staff confirms eligibility and assists with resumés and interviewing skills in optional workshops and individual meetings.

Institutional Recognition of Co-op

3 credits are awarded for 300 hours of work. There is an additional 1 credit for the related class. Credit counts towards degree. There is a notation of the co-op work experience on the transcript.

Integrated Learning Mechanisms

- Student and faculty co-op handbooks outline requirements and process.
- Learning agreement is developed by faculty, employer and student.
- Learning elements vary by department. These can include portfolios, journals, and reports. Some departments integrate SCANS competencies.
- Faculty advisors run the weekly co-op-related classes, which are required in most departments with co-op. CCM is piloting on-line related classes.
- Faculty conduct on-site co-op employer visits.
- Evaluations include: student evaluation of the program; faculty evaluation of the student and the worksite; and employer evaluation of the student and the program.
- Teaching faculty members evaluate students and assign grades.
- Academic departments receive a list of co-op students and their worksites.
- Division deans, faculty from each department, employers and students serve on the Co-op Advisory Board.

New/Special Administrative Practices

• The Career Services and Cooperative Education Department uses the webpage for brochures, program information, materials, and interaction with students and employers.

Special High School/Employer Outreach

- CCM was the lead fiscal agent on the local STW partnership with 3 community colleges, 38 high schools, and a total of 110 partners.
- Selected high school seniors with co-op who come to CCM are awarded co-op scholarships provided by the college.
- Since 1988, CCM has offered a no-credit Pre-Coop paid work experience.
 Participation is noted on the transcript. Students who worked on co-op in high school may be able to participate in co-op earlier in the college program through Pre-Co-op.
- CCM offers 2 + 2 + 2 programs that integrate Co-op and Tech Prep.

CO-OP PROGRAM INFORMATION: Albert Foderaro (973) 328-5245

Institutional Enrollment: 7,550 (3,243 FT) Co-op periods: 15 weeks

Co-op Students: 240

Co-op Employers: 141

Characteristics: Opt. & mand, predominantly parallel

Fee: None

Co-op begins: Fresh, 2nd semester

Co-op established: 1975

Selective criteria: 2.0 g.p.a., credits in major Min/Max terms: 2 maximum; 1 minimum

Academic Divisions: Agricultural & Natural Resources; Biology; Bus; Chemistry; Commercial Art; Graphic Arts; Chemical Engineering; Computer Science: Early Childhood Education; EE: Environmental Studies; Hospitality Management; Liberal Arts; Mechanical Engineering; Medical Lab; Office Systems; Photography; Technology; Telecommunications



Dowling College Oakdale, NY

One of our greatest opportunities is to educate today's busy students about the intrinsic and long-term value of participating in a hands-on education experience outside the classroom. As the cooperative program expands, our challenge is to maintain our high level of personal attention to our students and cooperative partners.

> Dr. Victor P. Meskill President

Program Orientation for Co-op

Two mandatory two-hour workshops in resumé writing and interviewing skills are pre-requisite, as well as minimum G.P.A. and credit requirements.

Institutional Recognition of Co-op

Academic credit (3-12 credits) that counts toward the student's degree is awarded. There is a notation of participation on the student's transcript. The college holds an annual Co-op Appreciation awards breakfast for students, employers and faculty who have participated in the program.

Integrated Learning Mechanisms

- Learning objectives are established and contractually signed by the student, faculty advisor, co-op coordinator and work supervisor.
- An information interview and a company biography are required.
- Organizational dynamics exercises relevant to the student's placement are a required part of the students' coursework.
- A faculty-assigned project or paper is the fundamental requirement for the student's integration of theory with practice and is the primary element for student's course grade.
- Scheduled site visits, when possible, are arranged to meet with the student's supervisor and review the program and student's progress.
- An exit interview of the student's self-assessed progress and description of duties is performed.
- **Evaluations** are completed by both student and employer.

New/Special Administrative Practices

Freshman Orientation classes host a career services representative for a class presentation on Co-op and Career Services.

Special High School/Employer Outreach

- Enrollment Services Counselors actively market the Co-op program.
- Career Services Program Manager serves on a local public school district's advisory board.
- Staff members participate in local high schools' Career Days.

CO-OP PROGRAM INFORMATION: Dawn M. Antonino (516) 244-3391

Institutional Enrollment: 5,728 Co-op Students: 116

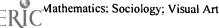
Co-op Employers: 116

Co-op periods: 12-20 weeks Fee: None Co-op begins: Junior, 1st semester Characteristics: Optn'l, (except Int. Bus & Trans); parallel Selective criteria: Completed 75 credits, 12 in major, 2.6 GPA (3.0 in maj.)

Co-op established: 1990 Min/Max terms: 1 term min./2-3 terms max.

Academic Divisions: Aeronautics; Accounting; Biology; CIS; Computer Science: Economics; English; Management; Marketing:

Mathematics: Sociology; Visual Arts; Transportation



Hocking College Nelsonville, OH

In an era of diversity, cooperative education provides the institution and its students with a reliable educational alternative. While providing an advanced entry into the working world, cooperative education helps cement the relationship between a college and industry.

Dr. John J. Light President

Program Orientation for Co-op

Students have group or individual orientation. There is a required job skills seminar. Students are required to interview with the co-op supervisor of their field prior to beginning work.

Institutional Recognition of Co-op

Up to 6 credits per quarter are awarded by co-op staff. The credit counts toward the degree.

Integrated Learning Mechanisms

- Co-op coordinator meets with students once a week to discuss the job.
- Students are enrolled in a mandatory job skills seminar.
- A daily diary or log is kept by students. This is discussed weekly with the coordinator and turned in as a written report at the end of the semester.
- Evaluations are completed by the coordinator and the employer.

Special High School/Employer Outreach

- The college works closely with Tri-County Vocational School, and has established an articulation agreement.
- The college is articulating with the public school system. High school coop or apprenticeship students who are referred by the high school can begin co-op at the college without waiting.
- The college is integrating Co-op and Tech-Prep.

CO-OP PROGRAM INFORMATION: Cindy Baden (740) 753-3591

Institutional Enrollment: 5500 FTE

Co-op Students: 20

Co-op Employers: 5

Co-op periods: 11 weeks

Fee: None (part of tuition)

Co-op begins: freshman, 1st quarter

Characteristics: optional, alternating & parallel Co-op established: 1968

Selective criteria: none

Min/Max terms: 1 term min./4 terms max.

Academic Divisions: Accounting: Business: Office Administration



Holyoke Community College Holyoke, MA

During its 28-year history, the Holvoke Community College Cooperative Education Program has built a solid base of employers whose work environments and needs have evolved along with the Program which has remained successful in meeting these needs. The School-to-Work Transition initiative provided the impetus to reach out to the secondary schools through the school-to-work partnerships and the Tech Prep West consortium to provide a continuum of work and learning for the students. They can begin with a high-school co-op experience and continue through college (2- or 4-year) in increasing levels of responsibility and emerge into the workplace full time with relevant skills (including SCANS) and up to 3 or 5 years experience in the major—a win-win for all concerned.

> Dr. David M. Bartley President

Program Orientation for Co-op

There is a required one-on-one meeting with a job developer after the student completes the application card, has eligibility verified and registers for the co-op course. The Co-op Student Handbook is reviewed. There are optional resumé and job search skills workshops.

Institutional Recognition of Co-op

Co-op is required in some majors and a curriculum elective in others. 6 credits per experience are awarded for alternating co-op; 3 for parallel (maximum of two co-ops). A letter grade is awarded and co-op appears on the transcript as a special number course under the major.

Integrated Learning Mechanisms

- A learning agreement is developed, including work values, application of general & specific skills of major, short- and long-term goals. Approved by student, faculty, and employer. (Re-examined midterm and can be adjusted)
- Weekly seminar is required and is conducted by teaching faculty. Elements include a journal, job description, and paper.
- Evaluations are completed by employer (twice/semester), student & faculty
- **Faculty coordinators** make at least one site visit per semester.
- Grades are awarded by faculty, based 50% on employer evaluation & 50% on seminar (25% class participation, 25% reading and writing assignments).

New/Special Administrative Practices

- Co-op questions are included in HCC First Year Out survey of graduates. 31% of co-op students remained with co-op employers after graduation.
- Co-op and Career Services were combined, and recently added School-to-Work and Tech Prep under one umbrella.
- For 14 years HCC was contracted to provide co-op services for students at neighboring 4-year institution.

Special High School/Employer Outreach

- HCC has assisted high schools in the development of a career seminar.
- HCC developed a Menu of Services for STW partnerships, offering mentor training, career course curriculum and instruction, career center development, DACUM, and WorkKeys.
- Co-op Dean is on five STW boards & directs a Tech-Prep consortium.
- HCC offers teacher externships for faculty, using the co-op employer base.

CO-OP PROGRAM INFORMATION: Theresa Howard (413) 552-2299

Institutional Enrollment: 3,600

Co-op Students: 266

Co-op Employers: 185

Co-op periods: 15 weeks

Fee: none

Co-op begins: after 27 credits

Characteristics: Mand. & Opt, mostly parallel

Selective criteria: good academic standing

Co-op established: 1971

Min/Max terms: 1 min, 2 max.

Academic Divisions: Accounting; Art; Biology; Bus; Civil Engineering; Electronic Media; Graphic Arts; Communications: Criminal Justice: Education: EE: Engineering; English: Environmental Studies: Health; Hospitality Management; Journalism; Management: Marketing: Mechanical Engineering; Nursing; Photography; Psychology; Social Work; Sociology; Technology; Theater; Visual Arts



Johnson & Wales University Providence, RI

We need to create a climate that would establish open communication between educational institutions and leading employers throughout the world. I think if we could fashion curricula that have a better connection between the demands of what's happening in the workplace today and the student's learning, we could close the gap between education and workplace performance.

> Dr. John A. Yena President

Program Orientation for Co-op

All students are required to attend an information meeting with the co-op coordinator as well as complete the application form and participate in a formal interview. Optional resumé workshops and career counseling are offered. Students must present a career portfolio during the co-op interviews.

Institutional Recognition of Co-op

15 quarter credit hours (one full term) are awarded for co-op study. The credit counts towards the degree. Part-time co-op programs are also available to business and hospitality students.

Integrated Learning Mechanisms

- Informational interview and company biography research are required.
- Learning objectives are developed collaboratively with faculty and industry, utilizing the DACUM occupational analysis process.
- Midterm and final evaluations are completed by students as a required element.
- A final project is required, demonstrating the skills and knowledge gained through the co-op experience.
- Faculty advisor, co-op coordinator, and supervisor evaluate and review final project.
- Credit is awarded jointly by faculty and co-op coordinators.
- Exit interviews of students are conducted by co-op coordinators.

Special High School/Employer Outreach

- The Career Development Office conducts numerous outreach programs to high school students and faculty, encouraging and supporting the School-to-Work Programs.
- Presentations are conducted at national and regional conferences such as AVA, DECA, and NAF to educate teachers on the effectiveness of a career portfolio, documentation/verification of students' skills and cooperative education partnerships within the community.
- A mentorship program among J&W students and employers has been formalized to link students with professionals in their chosen field of study.

CO-OP PROGRAM INFORMATION: Karen Petrarca (401-598-1457) Business, Hospitality; Marie McGovern (401-598-4732) Culinary, Pastry

Institutional Enrollment: 11.599 (campuses in 4 states) Co-op Students: 810

Co-op Employers: 300

Co-op periods: 11 weeks

Fee: \$7 for manual

Co-op begins: Soph (Cul); Jr (Bus. Hos)

Characteristics: Optional: Cul/Pas & Intnat'l Hosp mand. Selective criteria: 2.75 GPA; 3.25 for intnat'l; applied & accepted into prog.

Co-op established: 1979 Min/Max terms: 1 minimum demic Divisions: Business College; College of Culinary Arts; Hospitality College

As a comprehensive, interactive, teaching-oriented institution, Kean University's mission focuses on serving its urban/metropolitan region of New Jersey through programs which reach directly into the community. The Cooperative Education Program is a major element in achieving a primary strategic goal of being community-responsive. The Co-op Program serves as a bridge between the classroom and work setting, providing a more realistic context for individual growth and an educational environment in which students can be more adequately prepared for the workplace. Most critically, Co-op Education creates a student-centered learning environment which nurtures not only the professional development of the student, but also the lifelong learning skills essential in a rapidly evolving global society.

Dr. Ronald L. Applbaum President

Program Orientation for Co-op

Students are required to meet with co-op staff or with their faculty advisor. Career Center staff critique resumés. There are optional workshops on resumé writing and job search skills. Co-op presentations are included at new and transfer student open houses.

Institutional Recognition of Co-op

Credit is awarded and varies by department (up to 12 credits). Credit counts towards degree. The co-op course appears on the transcript.

Integrated Learning Mechanisms

- Teaching faculty members approve work positions and award credits.
- Learning elements vary by major. These can include written reports, oral reports, videotaped presentations, and seminars.
- Evaluations are completed by faculty and employer.
- Co-op director participates in faculty events and meetings.

New/Special Administrative Practices

• The University has started Co-Curricular Transcript Program — an official record of students' participation in organizations, workshops, conferences, and Service Learning projects.

Special High School/Employer Outreach

- The University initiated a breakfast meeting to introduce employers to each academic school on campus. Co-op was highlighted as one of the participating programs.
- Co-op coordinator recruits co-op positions in top accounting firms through NJ CPA Extended Internship Program.
- University President is on the local Workforce Investment Board.
- Development office's initiative targeting corporations for partnerships with the university has led to increased co-op positions.

CO-OP PROGRAM INFORMATION: Ray Ford (908) 527-2357

Institutional Enrollment: 11,500

Co-op Students: 308

Co-op Employers: 225

Co-op periods: 16 weeks

Fee: None

Co-op begins: Junior, first semester

Characteristics: Optional, predominantly parallel

Selective criteria: 2.5 – 3.0 g.p.a., varies by department

Co-op established: 1977

Min/Max terms: varies by department

Academic Divisions: Schools of Business; Government and Technology; Liberal Arts; Natural Sciences; Nursing; Math and Computer

Science

Miami-Dade Community College Miami, FL

Cooperative education is one more indicator of the serious partnerships evolving between business and education. Our challenge is to be as precise as possible in meeting workforce needs while remaining flexible in our capacity to respond. The simple key is communication, making the linkages with business and industry in-depth and practical. If we are successful, our institutions will be more effective and our students will have a better chance than ever to succeed and flourish.

> Dr. Eduardo J. Padron President

Program Orientation for Co-op

Students who are unsure of career objectives or desire to reaffirm career choices are offered a 3-credit Transitional Co-op Program with career counselors. Vocational inventories and job market exploration are offered. Optional workshops on job search and workplace skills are also offered in the same department.

Institutional Recognition of Co-op

Academic credit is awarded. A maximum of 6 elective credits can count towards the degree. Co-op credits are found in vocational and A.S./A.A. programs.

Integrated Learning Mechanisms

- Co-op teaching faculty are housed in their respective departments.
- Learning objectives are set by the student, Co-op faculty coordinator and employer.
- A workbook with additional assignments formalizes learning objectives.
- Evaluations are completed by the Coordinator and the employer.

Special High School/Employer Outreach

- MDCC has taken a role in Education Reform through School-to-Work linkages with high schools.
- The college has dual enrollment of high school students.

CO-OP PROGRAM INFORMATION: Roger Wadsworth (305) 237-2758

Institutional Enrollment: 70,982 Co-op periods: 12-16 weeks

Co-op Students: 570

Co-op Employers: 180 per year Fee: none (tuition for 3 credits) Co-op begins: Freshman, 2nd term

Characteristics: Optional, mostly parallel

Selective criteria: GPA 2.0-2.5 min.

Min/Max terms: I minimum; 2maximum

Co-op established: 1968 Academic Divisions: Architecture: Business; Communication Arts; Computer Information Systems: Criminal Justice: Education &

Psychology; English; Interior Design: Liberal Arts; Medical; Music; Physical Therapy; and Political Science

Michigan Technological University Houghton, MI

At Michigan Technological University we have a long tradition (twenty-five years) of offering cooperative education opportunities to our students. While student participation is voluntary, we strive to provide each participant with a quality educational experience linking their classroom training with the realities of the world of work. In developing business relationships with our corporate partners, the university's objective is to encourage educational work assignments designed to help students make solid career decisions.

A crucial challenge in today's economy is to convince students that the extra effort and time spent to pursue a cooperative education program is worthwhile. It has been my experience that cooperative education students make better career decisions and receive more job offers at higher salaries than traditional students. Cooperative education is a win-win situation for the students, the corporations and the university.

> Dr. Curtis J. Tompkins President

Program Orientation for Co-op

Students have individual meetings with the co-op coordinator or staff assistant. There are optional 1-hour workshops on job search skills.

Institutional Recognition of Co-op

2 credits/quarter are awarded. Credit counts towards the degree with a maximum of 6 credits. Co-op is not required, but highly recommended. There is a notation of co-op participation on the transcript.

Integrated Learning Mechanisms

- Departmental co-op advisors are also teaching faculty.
- Co-op staff and faculty meet with students prior to their assignments to discuss the experience and anticipated results
- Learning objectives are developed and approved by the co-op director, faculty, employer and student.
- Co-op director conducts on-site meetings with supervisor and students, depending on time availability.
- Evaluation forms are used to assess Critical Life Skills. Evaluations by the employer and faculty are required.
- Students complete a written report of 25-30 pages.
- Some academic departments allow technical electives for co-op experience, evaluated by the department. Otherwise, two free electives per quarter are awarded for a successful co-op experience.
- Scientific Technical Communications program has a technical writing requirement, more in-depth employer feedback, and a senior design project.

New/Special Administrative Practices

- The university president has provided stability and strong support for the co-op program. During his recent visit to Southeast Asia, he initiated international co-op programs with several employers.
- The university has international independent learning projects with schools in other countries. Students can complete co-op requirements through the international experience.

CO-OP PROGRAM INFORMATION: James A. Turnquist, (906) 487-2313

Institutional Enrollment: 6,257 Co-op periods: 10 weeks per quarter

Characteristics: Optional

Co-op established:

Co-op Students: 512

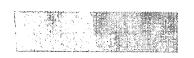
Co-op Employers: 432 Fee: None (Tuition for credits) Co-op begins: Soph, 1st qtr. Selective criteria: 2.2 g.p.a., completed one year as full-time student

Min/Max terms: 2 minimum. maximum varies by department

Academic Divisions: Business Administration; Engineering; Forestry; Science and Arts: Technology



Naugatuck Valley Community-Technical College Waterbury, CT



A constant challenge facing higher education today is how to effectively train our students for a twenty-first century workforce. Students will need to possess the knowledge and skills to succeed in a high-performance economy fueled by rapidly changing technology and global competition. The students who have the edge are those who develop a vision that includes lifelong learning, openness to change, and a "can do" attitude. This knowledge is best developed in partnership between the school and business community. Our cooperative education program is a manifestation of the school-to-career model that fully integrates school-based learning, work-based learning, and connecting activities. Contextual learning in partnership with business provides students with this vital added dimension to their education.

Dr. Richard L. Sanders President

Program Orientation for Co-op

Students meet with Co-op Employment Specialists for orientation, transcript evaluation and co-op placement. A two-hour workshop on resumé writing and interviewing skills is required.

Institutional Recognition of Co-op

3 credit hours per semester are awarded, with a maximum of 6 credits in some majors. Credit counts towards graduation. Co-op is either a required course or offered as a recommended elective, depending on the major.

Integrated Learning Mechanisms

- Myers-Briggs Type Indicator (MBTI) is administered and interpreted for all co-op students.
- Career-related learning objectives are developed jointly by students, academic program coordinators and co-op instructors.
- Weekly seminar is required in all majors. (One hour long for 15 weeks).
- Co-op faculty conduct on-site employer visits each semester.
- Competencies for assessment of workplace learning are developed by faculty and the co-op office.
- Employer evaluations are used to assess the student's performance and competency in various skill areas.
- Final paper and presentation are required for every co-op student.

New/Special Administrative Practices

 The college has instituted cooperative learning experience in the area of Fine Arts.

Special High School/Employer Outreach

 Reorganization teamed Co-op, Placement and Tech Prep into the Office of School to Career, providing students with an integrated approach to workforce development.

CO-OP PROGRAM INFORMATION: Carolyn Karno (203) 575-8069

Institutional Enrollment: 4.408

Co-op Students: 242

Co-op Employers: 161

Co-op periods: 15 weeks (7 weeks, summer)

Fee: none

Co-op begins: after 24 credits

Characteristics: Mandatory & optional; parallel

Selective criteria: 2.0 g.p.a.; pre-req courses "c" or better

Co-op established: 1982

Min/Max terms: 1 minimum; 2maximum

ademic Divisions: Arts & Humanities; Behavioral & Social Sciences; Business; Engineering Technologies; Mathematics/Science

Peirce College Philadelphia, PA

Cooperative education and internships play an integral role in Peirce's ability to fulfill its mission of providing quality business, career, and technology education. Our students gain practical experience, acquire marketable skills, and explore career options. Conversely, employers are increasingly seeking a competitive recruiting advantage through structured cooperative education and internship placements. Most of Peirce's employers consider this approach to be one of their most effective pre-screening and hiring techniques.

Peirce College will seek new models, particularly for non-traditional learners, regarding the incorporation of work-related experiences into the curriculum. This approach is necessitated by changing workforce needs, emerging educational outcomes assessment requirements, and demographic shifts in the student body. Students in all majors will need greater technical knowledge and skills to effectively compete in the global marketplaces of the 21st century.

Dr. Arthur J. Lendo President

Program Orientation for Co-op

There is a required 8-week set of workshops the semester prior to a student's co-op.

Institutional Recognition of Co-op

3 to 6 credits may be awarded to sophomores & seniors depending on the major and # of electives in the program. Credit counts toward the degree.

Integrated Learning Mechanisms

- Academic advisors encourage participation in co-op.
- Weekly seminar is required while on co-op, run by co-op faculty. Students at a distant location have required video and self-learning assignments.
- Academic faculty are invited to conduct on-site visits with co-op faculty.
- Faculty advisors receive work reports and evaluations.
- Co-op faculty serve on institutional committees.

New/Special Administrative Practices

- The College President is a staunch supporter of Cooperative Education and a former officer of the National Commission for Cooperative Education.
- The College's mission emphasizes career-related experience; hence co-op is an important recruitment tool.
- A career plan check off sheet has been developed to guide faculty advisors
 when advising students. This sheet identifies stages during a student's
 course of studies when he/she is eligible to participate in the work-based
 learning programs offered by the college.

Special High School/Employer Outreach

- Through the Advanced Standing Program high school students can earn up to 6 credits for work in courses similar to the College's business curriculum.
- Early admission students can earn 6 credits the summer after high school graduation. Students are then eligible for a pre-co-op program, the Early Employee Selector Program, during their first term. After 45 credits, students are eligible for a sophomore co-op.

CO-OP PROGRAM INFORMATION: Barbara Zelnio (215) 545-6400

Institutional Enrollment: 2474 (FT & PT headcount)

Co-op periods: 15 weeks

Characteristics: Mand. & Optional; altern. & Parallel

Co-op established: 1959

Co-op Students: 66
Fee: None

Co-op Employers: 47

Fee: None Co-op begins: after 45 &/or 105 credits Selective criteria: 2.0 g.p.a., completion of pre-co-op workshop series

Min/Max terms: 1 minimum: 4 maximum

Academic Divisions: Accounting; Bus. Admin.: Court Reporting: Computer Network Tech.: Health Care Mgmt; Hospitality Mgmt; Travel & Tourism: Mktg; Microcomputing: Internat'l Business; Gen. Studies: Paralegal Studies: Legal Medical & Admin. Office Tech.



20

San Juan College is strongly committed to providing different learning opportunities for its students. Cooperative education is an integral part of the learning experience for increasing numbers and one that enriches the lives of our students. The opportunity to

> Dr. James C. Henderson President

Program Orientation for Co-op

A structured orientation program is required. Students have individual counseling with faculty advisor, appropriate division director, or academic advisor. Co-op coordinator reviews requirements and application. Students generally must have completed one-half (30 semester hrs) of required core courses at a "C" or better.

provide meaningful hands-on work experience for our students will certainly result in

individuals being better prepared for productive and rewarding jobs.

Institutional Recognition of Co-op

Typically credit is awarded: three semester credit hours for up to 20 hours/week; four or more credits for 20+ hours/week. Up to nine co-op credit hours are accepted as transfer credit toward a degree or certificate, as elective credit. Several co-op programs terminate with Associate of Applied Science degree.

Integrated Learning Mechanisms

- Pre-test/post test of student's self-evaluation is required.
- Training agreement is approved by the student, employer and co-op coordinator.
- **Programs and curriculum** are co-developed by employer and the college.
- Daily work logs are kept by the students and discussed with the employer and co-op faculty.
- Weekly reports are kept by the student and outline the most challenging job for the week.
- Written report is required at the end of the semester.
- Final evaluation by employer is required. The worksite supervisor assigns and monitors the work and evaluates the student's job performance.
- Grades are assigned jointly by the employer and college co-op representative.

New/Special Administrative Practices

Placement services are offered to students and alumni without charge. These include resumé preparation and updates as well as employer worksite and oncampus interview arrangements.

Special High School/Employer Outreach

- SJC's Employer-Based Cooperative Education Program involves two area power plants and local law enforcement agencies. Employees can earn an Associate of Applied Science degree through general education courses at the college and onthe-job co-op courses from their employers.
- SJC is a regional training center for the GM ASEP (Automotive Service Educ. Program) and Toyota T-Ten (Toyota Technical Education Network). Students work alternating co-op periods and are sponsored by individual dealerships.
- SJC articulates classes with high schools to facilitate transition to college.
- High school career portfolios help with job applications and college entrance.
- School-to-Career provides mentor training for high school student employers.

CO-OP PROGRAM INFORMATION: Terry M. Peek (505-599-0245)

Institutional Enrollment: 4.617 Co-op periods: Vary by program

Co-op Students: 206 Fee: None (tuition for credits) Characteristics: Parallel and alternating

Co-op Employers: 70 Co-op begins: Sophomore Selective criteria: 2.0 GPA, sophomore status, good financial status

Co-op established: 1981

Min/Max terms: 1 minimum; 2 semesters maximum

cademic Divisions: Business: Computer Science; Humanities: Math & Science: Technology



University of Maryland-Baltimore County Baltimore, MD

Cooperative Education at UMBC celebrates its 25th anniversary this year. As a program of UMBC's Shriver Center, co-op enables undergraduate and graduate students to combine classroom study with on-the-job experience, earn academic credit, explore the link between theory and practice, and learn valuable job-related habits and skills. The Center maintains relationships with over 200 public, private and non-profit sector employers who place co-op students throughout the Baltimore-Washington DC metropolitan area. We are proud of our longstanding commitment to leadership development of our co-op students as evidenced by the founding of the Beta chapter of Kappa Theta Epsilon on our campus.

As we move into our second quarter century of services to UMBC students, we face several challenges. We must continue to identify high quality, relevant experiences that match the needs of our students to the demands of the workplace. We must be increasingly responsive to the needs of our business and industry partners as they become more global and technological. And, we must continue to frame co-op as an element of the curriculum, since learning is at the heart of the academy.

> Dr. Freeman A. Hrabowski President

Program Orientation for Co-op

There is a required 45-minute Introductory Session presenting an overview of the program and requirements. Additionally, students are coached in the preparation of credentials including the cover letter and the resumé. Credentials are forwarded to potential employers.

Institutional Recognition of Co-op

Most departments award 1-3 credits per semester for learning linked to work experiences. In most departments, the credit counts towards the degree. There is a transcript notation of co-op.

Integrated Learning Mechanisms

- A non-credit practicum course is required for co-op students, and appears as a permanent notation on the transcript. Requirements include the developing learning objectives, mid-placement evaluation of the experience, final evaluations of the student's performance and of the placement, and a series of seminars that address relevant work-related topics.
- Academic faculty members provide feedback on placement opportunities and learning objectives.
- Academic faculty is invited to conduct on-site visits with program staff.
- Academic faculty members award credit in the departments recognizing co-op credit.

Special High School/Employer Outreach

- Program staff serve as active participants on the local School-to-Careers steering committee.
- Program staff coordinate, along with the University's Office of Continuing Education, a mentoring program that matches high achieving students with mentors from corporate members of the UMBC's President's Advisory Council.

CO-OP PROGRAM INFORMATION: Greg Simmons (410) 455-2493

Institutional Enrollment: 10,122 (7,227 FT)

Co-op periods: 12 weeks: 24 weeks

Characteristics: Optional: Alternating & Parallel

Co-op established: 1974

Co-op Students: 146 Fee: \$35 PT: \$70 FT

Co-op Employers: 146 Co-op begins: Sophomore,

Selective criteria: 2.5 g.p.a., full-time degree-seeking student

Min/Max terms: 2 minimum

Academic Divisions: Arts and Sciences; Engineering & Computer Science



University of Michigan-Dearborn Dearborn, MI

At the University of Michigan-Dearborn, the importance of cooperative education and internships is recognized not only in the mission statement of the University, but also in our colleges and schools. We are fortunate to be located in southeastern Michigan, the intellectual capital of the automobile industry, an important global trade center, and the site of a wide variety of opportunities for strategic partnerships. One of our most essential goals is to provide our students with practical application of classroom learning in the professional work environment, because we know that our cooperative education graduates have a significant competitive edge for the best jobs.

Dr. James C. Renick Chancellor

Program Orientation for Co-op

There are five required two-hour seminars on resumé-writing, interviewing skills and professional workplace behavior. (Business, Engineering) Students have individual sessions with the co-op staff. (Arts & Sciences, Business, Engineering)

Institutional Recognition of Co-op

1-3 credit hours/term awarded. Credit counts towards degree (A&S, Bus, CIS) or is additive (Eng). Certificate awarded upon graduation (Bus, Eng).

Integrated Learning Mechanisms

- Learning objectives are developed by students. (Arts & Sciences)
- An academic seminar is taught by the faculty co-op director. (A&S)
- Student reports include company background, major duties performed and evaluations, what was learned and how it relates to educational development. (A&S, Bus, Eng)
- Staff on-site visits promote integration of learning. (A&S, Bus, Eng)
- Evaluations are completed by students and employers. (A&S, Bus, Eng)
- **Progress reviews** are conducted by staff with students upon return from work. (Bus, Eng)

New/Special Administrative Practices

- Interdisciplinary leadership program provides guest industry and government speakers, as well as discussion sessions and mentoring for 12-20 students each year
- Community Service Internships are offered in the School of Management.
- Bus. & Eng. departments are developing a web-based referral system.

Special High School/Employer Outreach

- Partner Plus Minority program bridges with the community college. (Bus)
- Staff members participate in a variety of admission activities.
- Staff members regularly visit new employers and make presentations at companies and professional associations.

CO-OP PROGRAM INFORMATION: Dennis Drean 313-593-5145 (Engineering); Charlotte Whitney 313-593-5249

(Business); Patti Jones 313-593-5188 (Arts & Sciences)

Institutional Enrollment: 8,130

Co-op Students: 462

Co-op Employers: 190

Co-op periods: 16 weeks

Fee: None, tuition

Co-op begins: Soph (A&S); Jr (Bus, Eng)

Characteristics: Alt (Bus, Eng); Alt & Parallel (A&S, CIS) Selective criteria: 2.6 GPA (Bus); 2.3 (ENG); 2.25 (A&S)

Min/Max terms: 2/3 (Eng); 2/6 (A&S): 1/2 (Bus)

Co-op established: 1959

ademic Divisions: College of Arts, Sciences and Letters; College of Engineering and Computer Science; School of Management

Profiled Institutions

NCCE gratefully acknowledges the participation of the following presidents and practitioners in the *Institutional Profiles of Integrated Learning*.

Antioch College

Robert H. Devine

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Marie McGovern

Co-op Professional (Culinary, Pastry)

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Memberships

Ms. Heather M. Stewart

Administrative Assistant

University of Louisville



For further information or to order additional copies, please contact:



National Commission for Cooperative Education

360 Huntington Avenue, 384 CP Boston, MA 02115-5096

Tel: (617) 373-3770 Fax: (617) 373-3463

E-mail: ncce@lynx.neu.edu

Homepage: http://www.co-op.edu





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