Online Technology Career Preparation Course

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Cincinnati State Technical and Community College is a comprehensive community college with an enrollment of approximately 8500 students. Students attending Cincinnati State are provided an education that features a combination of theory and practice, delivered via appropriate classroom, laboratory, and cooperative education experiences. Cooperative education is considered an integral part of the learning experience at the college. Cincinnati State's commitment to co-op is demonstrated in part by the large number of student placements each year. The college places more students on co-op assignments than any other two-year college in the country and typically ranks in the top five among all educational institutions in total co-op placements.

Since its beginning almost 40 years ago, Cincinnati State has emphasized the value of integrating cooperative work experience with academic coursework. The College's graduate employment rate of 98% speaks directly to Cincinnati State's commitment to providing quality education enriched by on-the-job learning experiences. Students encounter "real world" job demands, helping to clarify their career choices as well as promoting independence and responsibility in the workplace.

Cooperative education is not an add-on component in program curricula but is embedded into the complete learning experience. Students are prepared for their co-op experience via pre-placement orientations, are visited and evaluated each term they are employed, and are required to submit work assignments that ensure that they take maximum advantage of their time in industry.

The preparation prior to placement on the co-op job has traditionally included a professional practice component. Although some programs have a program-specific orientation course in their curriculum, most of the programs have addressed this topic through a traditional face-to-face course, *BT 9200 Professional Practices*. The course description for *BT 9200* reads, "A course that prepares students for the cooperative education interview process, heightens student awareness of work ethics, and provides skills that ensure professional success." This year the Information and Engineering Technologies Divisions are piloting an online course to replace the traditional face-to-face course with the intention of enriching the course content, providing more interaction among participating students, addressing specific TAC/ABET accreditation criteria, and making the course available to a broader audience.

The new course, titled *ET 9300 Technology Career Preparation*, was created to help students inventory their personal attributes, explore technology career opportunities, learn effective job

search techniques, including the creation of professional portfolios, resumes and cover letters, prepare for a job interview, and identify the characteristics of desirable job performance. Although the course was initially envisioned to prepare students for co-op assignments, it evolved into a course that quite clearly extrapolates to preparation for full-time employment as well.

The course is composed of five lessons, each with two related topics, designed to be completed in one week each.

Lesson 1 – Personal Inventory	Topics: *Personality Assessment, Values and Skills Assessment*
Lesson 2 – Career Investigation	Topics: *Career Awareness, Employment Trends*
Lesson 3 – Job Search Methods	Topics: *Sources for Job Leads, Resume/Cover Letter, Portfolio*
Lesson 4 – Interviewing	Topics: *Pre-Interview Tasks, Interview Skills*
Lesson 5 – Job Performance	Topics: *Characteristics of Good Job Performance, Cultural Awareness*

Although the material can be accessed at times chosen by the students, each lesson is expected to be completed during the week assigned. Students' progress can be better monitored via this delivery method with instructors ensuring that no one is falling behind in the course.

All topics presented in the course are accompanied by activities and assignments. Activities might include researching related web sites linked via the course to supplement the coverage of a topic or participating in a threaded discussion regarding the personality characteristics identified by the Jung Personality Test. Assignments are written reports that answer questions presented in the course. Each assignment is accompanied by a "typical response" that portrays the expected length and detail expected of the student submission. Assignments are reviewed by the instructor but not graded. Students receive credit for each assignment upon formal notification from the instructor of the acceptance of the submission. No tests or quizzes are given. All assignments must be submitted and accepted in order for the student to receive credit for the course. The course is only offered on a pass/fail basis, no letter grade is assigned.

All course content is contained in the course web site, though two auxiliary software packages are used to support part of the course. No supplemental textbook is required. A series of FLASH movies are used to present the majority of the material. No extensive, purely text content is used that might discourage student interaction with the course site. The course introduction, career awareness, and job performance topics include extensive video clips narrated by practioners in engineering and information technology fields. Audio and textural versions of the videos are included to support students with limited bandwidth capabilities. DVDs containing all of the video material used in the course are currently being developed for distribution to students who cannot access the videos. Currently a large off-site media server is being used to stream the videos. The server was obtained via a grant co-sponsored by the University of Cincinnati, intended to demonstrate the ability of an off-campus server to accept, house, and deliver large media clips for another educational institution.

The course has an introduction that includes an overview containing the course description and learning outcomes. The introduction also includes a testimonial about the future value of careers

in technology, presented by former astronaut, Kathy Sullivan. Also included is a "how to" section that contains general information about taking an online course as well as specific information about requisite hardware and software, navigating the site, submitting assignments, due dates, grading information, etc.

Lesson 1, *Personal Inventory*, is designed to help the students learn about themselves. After completing an online *Personality Assessment* test, students are required to investigate typical careers associated with their personality type and asked to identify careers most commonly associated with individuals with their personality traits. Multiple online resources are provided to encourage a thorough exploration of the topic. While working their way through the second topic, *Values and Skills Assessment*, each student identifies things that are important to them and then reports on careers that would provide those environments.

In Lesson 2, the *Career Awareness* topic includes a scenario that exposes students to a variety of technical fields of study. In the scenario a mythical company has decided to begin manufacturing handheld MRIs for use at accident scenes. As part of one activity students are required to investigate how the 23 unique engineering and information technology professions are involved with the creation of the product. In each case students are informed how the individual would be involved in this particular case and also exposed to a video depicting the general day-to-day activities of a professional in that field of study. The video narrates the activities in a typical work day, the general characteristics of a professional in that field of study as well as the required academic preparation for that career. As part of one assignment students are asked to identify technical fields that would be good fits for them as well as careers that would not be a good match. In the second topic, *Employment Trends*, students research via a variety of provided resources, information related to the careers of interest to them. They discover recent employment trends, future projections, and average salaries.

Lesson 3, *Job Search Methods*, is designed to assist students in finding job leads in their chosen field of study and preparing a cover letter, resume, and professional portfolio. A FLASH movie is used to expose the students to ten of the most successful methods for finding a job opening. After reviewing the material the students are required to identify their own network and visit the appropriate web site of the professional organization associated with their profession. A supplemental software package supplied in support of the course is used by the students to develop a cover letter and resume. Students are also exposed to the characteristics of a quality portfolio and then are required to critique an online portfolio provided via the course site.

In Lesson 4, *Interviewing*, students are instructed how to prepare for an interview and how to participate in an interview. A FLASH movie addresses issues such as proper attire and appropriate questions for the employer. A supplemental software package, required as part of the course, allows the students to be "interviewed" by a prospective employer. The online interviewer poses a series of typical questions that might be addressed and then the student can watch a pair of typical responses as well as listen to an "interview coach" narrate some suggestions about how to address the inquiry.

In the final lesson, Lesson 5, students are exposed to a series of videos narrated by technology-related business professionals that discuss the merits of ten valuable employee characteristics

such as good work ethic, dependability, and creativity. The last topic addresses the issue of *Cultural Awareness* in the workplace. This topic was added in part to address the TAC/ABET criteria related to this topic. The activity related to this lesson requires that the students watch a video clip depicting a workplace encounter and then complete an assignment that includes discussing how they would have acted differently under the same circumstances.

Some of the advantages to the new online course are obvious. Students are presented, often for the first time, with the requirement of identifying their personal characteristics and the value of mapping them against possible career directions. Students are provided information about careers they might not have considered or even known about. They are exposed to employment trends in their field of study, how to look for jobs, how to prepare for interviews, and expected behavior when they are hired. Because the course is presented asynchronously, they can complete the course at their own pace and at times convenient to them. Because the course material is embedded in the web site the continuity of delivery is guaranteed. There is little concern that one section of the course will be taught differently than another presented by a different instructor. It exposes students to online course material, in most cases for the first time. Since the majority of the students intend to pursue technology-related careers, a good deal of their future "continuing education" will probably be delivered online. This guided, pass/fail, no test, relatively non-threatening course, is a good first exposure.

Some of the advantages are less obvious. Because the material is presented in a format that simulates how current students interact with computers (lots of click-and-watch versus read-and-read) they are more likely to investigate the content. Faculty members delivering the course are exposed to presenting content in a quality online format, including streaming video, interactive graphics, online discussion, and internet resources. Because the course is self-contained and does not require a course management system (Blackboard, WebCT etc.) it can be presented at area high schools to increase awareness of careers in technology. Since Cincinnati State is an active partner with area Tech Prep high schools the college is considering providing those schools with access to the course web site. Participating high school students who complete the material under the guidance and supervision of their sponsoring high school teacher will then be granted advanced standing for the course and not required to retake it upon entering the college.

The Information and Engineering Technologies Divisions at Cincinnati State employ seven full-time co-op coordinators who have responsibility for activities related to the cooperative education experience. The co-op coordinators are responsible for the development of jobs, placement and monitoring of students, and the assignment of grades for students placed in co-op positions. It is expected that they will become the primary instructors for the course. This additional interaction with their students will undoubtedly provide additional assistance in placing students in appropriate jobs. It is also expected that the coordinators will be exposed to potential problems prior to placement that might not be obvious without the direct and immediate contact that will occur between the instructor and the students via the new course.

As the course evolves over the next two years some potential for change include, creating similar courses for use in the health and business programs, improving the content and delivery method of the video material, and requiring the creation of a portfolio, not just the critique of one.

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