# Attachment 8 – Academic/Instructional Methodologies and Delivery Systems

## Academic/Instructional Methodologies and Delivery Systems

ITT Technical Institutes are institutes of higher learning that are committed to offering quality undergraduate and continuing education locally, nationally and worldwide to students of diverse backgrounds, interests and abilities. The institutions offer educational programs that integrate life-long learning with knowledge and skills to help students:

- Pursue their personal interests and objectives;
- Develop intellectual, analytical and critical thinking abilities, and
- Provide service to their communities.

The programs employ traditional, applied and adult-learning pedagogies and are delivered through traditional, accelerated and distance methodologies in a learner-centered environment of mutual respect.

Program curriculums contain a mixture of technical basic, core, and general education courses. The general education courses include courses from communications, humanities, mathematics, physical science and social science.

Currently courses are offered on a 10:1 clock-to-credit hour conversion ratio for lecture hours and a 20:1 clock-to-credit hour conversion ratio for laboratory hours. Most core courses are four-quarter credit hours consisting of a minimum of 30 hours of lecture and 20 hours of laboratory instruction each quarter. General Education courses are four-quarter credit hours and meet for a minimum of 40 contact hours during a quarter when taught in residence.

## Classroom Instruction

Students at ITT Technical Institute learn in a clean, environmentally comfortable, well lighted, safe and educationally appropriate atmosphere. Classrooms and labs have adequate space with up-to-date equipment. The laboratory settings, along with the equipment used; help prepare the students for a smooth transition from school to work. The facility is monitored daily for needed maintenance and equipment repair.

Proper Planning is essential to effective instruction. Faculty members are required to conduct each class according to a well developed lesson plan that supports the curriculum and lays out the strategies to be employed to present, apply, and evaluate learning. Each faculty member develops and facilitates lessons that create an environment in which the students enjoy learning.

Each lesson taught is supported by a written lesson plan. Sample lesson plans are included within the program syllabus for faculty use. Academic freedom exists within the framework of a standardized curriculum and as stated in ITT/ESI Policy "AA 11.0 Academic Freedom" (copy enclosed); instructors are encouraged to exercise academic freedom within defined guidelines. The Dean provides training in the development of effective lesson plans. The following are the essential elements that must be included in every lesson plan at ITT Technical Institute.

**The Daily Objective:** These objectives are based on the stated course objectives found in the faculty member syllabus and unit plans included with the syllabus. The daily objectives will include objectives covered in previous lessons that are being reviewed as well as the new objectives being covered that day. The daily objectives will be provided to the students either through a handout or by presentation on classroom materials such as blackboards or overhead projections.

**The Instructional Tools:** The lesson plan will list all the instructional tools to be employed by the faculty member (whiteboard, markers, projector, computer, models, etc.), as well as the materials used by the students (textbooks, calculators, lab equipment, etc.). If the course involves a laboratory component, a specific list of the equipment to be used must be part of the lesson plan.

**The Planned Activities:** The lesson plan is designed to provide an appropriate sequence of activities to review previous learning, to provide instruction on new material, to facilitate student participation, to require active learning and to measure student mastery of the objectives.

**The Evaluation**: Each lesson plan will include a section to evaluate the effectiveness of the lesson. This section of the lesson plan will list the graded activities such as quizzes, tests, assignments, projects, laboratory activities, student presentations, research papers, etc. along with the due dates.

The Academic Affairs management staff review quarterly class evaluations with each instructor. Areas of concern are discussed, guidance is given, and improvement plans of action are implemented; each step is designed to improve the overall instructional performance for the betterment of students. Instructors learn and are encouraged to continuously learn from their supervisors, peers, and other persons with recognized expertise through the various faculty meetings and training opportunities available through ITT Educational Services.

In addition to the classroom instruction, the Learning Resource Centers (LRC) is conveniently located within the school facilities and is available to students during normal school hours. The LRCs are designed and equipped to support the technical, career orientation and life-long learning goals of the colleges' educational programs by providing an organized collection of materials (both hard bound and electronic) that is built upon the curriculum, and includes basic skills and general education holdings and a substantial amount of technical material along with general reference and periodical materials selected specifically to address the needs of students. A description of the Learning Resource Center facilities is included with this submission.

## Curriculum Development

The curriculum for a new or updated program does not spring fully formed from a person or group; it is developed over a period of time and involves dozens of educators and industry experts, both inside and outside ITT Educational Services, Inc. The curriculum development process generally can be broken into three stages:

- Concept exploration
- Research
- Content development

### ***Concept Exploration***

The Corporate Curriculum Department includes curriculum managers who specialize in a particular industry or area of expertise. Each of these curriculum managers pursues a rigorous and ongoing program of keeping up with trends, changes and standards in their specific industries, through attendance at industry conferences; participation in industry trade associations; reading industry journals, books and news; consultation with textbook publishers, hardware and software vendors, technology service providers and interaction with other educators in that field. In addition, they interact with ITT/ESI program chairpersons and instructors, who bring their unique experiences to bear on industry directions.

Periodically the department holds planning conferences in which the findings of all the above sources are discussed and an assessment of potential responses to recent industry trends is conducted. From these planning meetings arise the early definitions of possible new programs of study, or updates to existing programs. The industry trends and needs and possible program attributes associated with them are analyzed to assist in the overall needs assessment step of the process.

***Research***

From among these and other individual members a Development Task Force is formed. Every new program of study and most major program updates all involve such a task force. Development Task Forces are comprised of a variety of individuals: ITT/ESI program chairs and instructors from various parts of the country, professionals working in the industry related to the specific curriculum, academics in the specific discipline related to the program and Subject Matter Experts and writers from textbook publishing companies.

Under the guidance of the corporate curriculum manager, the Curriculum Committee compiles the specifications around which the curriculum must be created. They include:

- Standards and skill sets identified by national and international academic and industry organizations.
- Desired student outcomes.
- Specific courses that would produce the needed skills, knowledge and outcomes, both technical and general education.
- Content, academic body of knowledge, outcomes and any other aspect required by the accrediting bodies and the many state regulatory bodies to assure quality of program and to verify it to be a college level offering.

Both the industry trends and needs and this in-depth information on skills, knowledge and outcomes are then combined to create a Concept Paper for the curricular program. The assumptions of the Concept Paper are then examined by the Market Research department, which gauges the market demand and trends for the jobs for which the program is targeted. When it is determined that the program is financially viable and operationally feasible, ITT/ESI management approves the school to proceed through the necessary approval processes.

The actual content development process is a complex acknowledgment of these multiple influences:

- Industry needs and trends as articulated by employers.
- Emphasis on demonstrable outcomes.
- The "commonly accepted" body of knowledge associated with a subject, as articulated by academe to the accrediting bodies.
- Multiple learning styles of students.

***Emphasis on Industry Standards***

Employer priorities play a significant role in the initial creation of a program or course and continue to influence when and how a program or course is updated.

Industry trends and employer needs are assessed both at the national level, through interaction with industry associations and skills standard boards, and at the local level through industry advisory boards and faculty input. The ITT Technical Institutes are divided into geographic districts, each with a faculty representative reporting the employer needs and faculty observations of that district to the centralized curriculum development department.

### ***Emphasis on Outcomes***

The emphasis on outcomes is prevalent through all levels of a curriculum: at the program level, course level and unit level. This emphasis also is the reason behind the use of centralized program and course design—to ensure consistent quality of outcomes.

The centralized curriculum development model also means that the faculty's entire focus is on classroom activities. While the content and outcomes are proscribed at all levels of the ITT Technical Institute curriculum, the individual faculty member is responsible for selecting learning activities at the unit level so that the students' learning styles and academic abilities can be accommodated in the classroom or lab.

The curriculum development process for ITT Technical Institutes also makes use of the most successful academic models for combining theory and practical application. After theory is taught, students are required to demonstrate their ability to apply that theory in a lab session. This allows for inter-activity that can employ visual, kinesthetic and spatial learning opportunities for learners who are better assisted by learning activities in addition to verbal ones.

### ***Education as a Foundation***

Critical thinking, problem solving, communication and teamwork skills are essential. In today's rapidly changing work environment it is also important that students know how to be independent learners and be able to logically process and apply new information. Modern workers also must be prepared to be part of work teams that include workers from various specialties and to "translate" the needs or requests from other departments into solutions.

Although general education courses must meet the strict academic body of knowledge standards for the area of study, they are also designed to assist the student in the development of the required "soft skills." Like their core counterparts, the course focus is on the demonstration of the skills rather than just the theory. The standardized curriculum includes projects that require critical reading and thinking, problem solving, communication and teamwork skills as the student applies the required theory.

The core and the general education courses are designed to work hand in hand to provide students with a solid academic foundation and the skills to be continuous learners throughout their careers.

ITT Technical Institute faculty members play a key role in the development and delivery of the educational programs. Faculty members in some locations serve on national curriculum committees as described above. All faculty members have the ability to recommend changes or additions to existing curricula by working through the established communications systems. Each faculty member also has the authority to add additional objectives to the stated course objectives based on that faculty member's expertise, experience and interests.

## Delivery Systems

In addition to all courses being offered to students in the traditional, residential format, select courses will also be made available to students in an online format. These courses are noted as such in the program outline in the college catalog. It is not the intention for a student to take all of their courses online, however, if a student has work or health issues that could create a break in his or her program, a need to repeat a course, or if a course is not available in residence during a specific quarter, then with approval to teach courses online, an alternative would be available to the student. Approval to provide online delivery offers more opportunities and flexibility to students than strictly residential delivery does. Assignment to an online core course would be for a specific reason and done with the knowledge,

permission and control of the college. The catalog advises applicants that some, or all, of their program courses may be taken online. In addition, the program outline within the catalog annotates those courses available for online instruction.

If a student is granted permission to enroll into an online course, the college Dean will notify the ITT/ESI Dean of Online Programs, who is responsible for direct supervision of the day-to-day operations of the distance education courses. A student's schedule will be set to reflect not only the residential courses taken, but also the online courses. The instructors for the online courses will meet the qualifications set forth in the Online Instructor Job Description included in Attachment 6 and will be employees of ITT/ESI.

The online courses offered across the ITT Technical Institute system are identical to the residence courses offered, with the same enabling objectives and learning outcomes. Distance education courses are delivered online over the Internet through an asynchronous learning network using the Questa course management system. There is a prescribed schedule for completion for each of the courses. Support materials for each distance education course are sent directly to the student. These materials may include course syllabus, textbook, CD-ROM and other printed documents required for the distance education course. Interaction between students, faculty and online support personnel is conducted through the Questa course management system, and email.

ITT/ESI has invested in the development of its own Course Management System (QUESTA). The QUESTA system allows for the direct control of all functionality related to delivering high quality distance education program offerings. Both faculty and students are required to participate in facilitated orientation programs prior to employment or starting classes. These programs are an essential component of the school's efforts to ensure a high quality educational program.

Occasionally, a situation may arise that prevents a student from taking a program course in its regular format during a particular quarter. If this situation occurs, the college may permit the student to take the course through directed independent study ("DIS"). Students must obtain permission from the Dean prior to enrolling in a DIS course. A student enrolled in a DIS course will be required to meet with the assigned faculty member at least once per week during the quarter for at minimum of 50 minutes per meeting to review progress in the course and to submit required assignments, make presentations or take exams. Students will not be permitted to apply for a DIS course unless they have completed at least 36 quarter credit hours and attained an overall cumulative grade point average of 2.5 in all coursework. The procedures and policy for DIS are outlined in the college's catalog.

## Portfolio and Experience Evaluation

Students who are enrolled in the programs are evaluated at various predetermined benchmarks in each course. The methods of evaluation vary for each course, but draw from the same set of measurement techniques. A student's grade is determined by his/her collective performance in such activities as participation, assignments, quizzes, exams, laboratory activities, projects, mid-term exams and final exams. Each of these activities has a specific value and a percentage weight that varies by course and is used to determine the course grade. Detailed evaluation procedures are included in the Instructor Syllabus for each course. A student must also meet satisfactory academic progress toward completing his/her chosen program of study. The criteria for meeting Satisfactory Academic Progress are detailed in the attached draft catalog.

ITT
ITT Educational Services, Inc.

POLICY MANUAL

# ACADEMIC AFFAIRS

## ACADEMIC FREEDOM

## AA 11.0

**Policy Owner: Academic Affairs**

Academic freedom by the faculty is encouraged within defined guidelines and is crucial to the integrity of the institution. The faculty is not authorized to make gross deviations from the planned course of study, nor are they permitted to limit published learning objectives. A faculty member has significant flexibility regarding teaching style and methods within the published minimum objectives to enhance the overall learning environment for his/her students.

During any remaining class time, after all of the stated learning objectives of the course have been thoroughly covered, faculty members are encouraged to cover any additional information on the course subject matter that they have gained through their academic or work experience that will benefit their students.

Faculty members are encouraged to further exercise academic freedom through participating in the curriculum development process through membership on Curriculum Committees and participation in other curriculum development activities.