Industrial Technology

Richard Fort, dean

Cycles included in report:
Cycle #3 8/1/14 to 7/31/15

Program Name: Industrial Technology
Program Cycle: #3 8/1/14   to 7/31/15

1 Program Summary Contact Information and Summary

INDT Program Contacts:
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The Industrial Technology program (INDT), budget organization #1229, teaches support courses for approximately seven (7) other technical career areas. The program currently includes two (2) courses -- Industrial Safety/OSHA-30 (INDT-125) and Workplace Skills (INDT-155); but technically is under modification through the Technology Division Curriculum Committee and the JCCC Educational Affairs Committee (CourseLeaf CIM and PIM) to include Construction Safety/OSHA-30 (currently CET-150, to become INDT-150 -- all approvals have been obtained except for the final JCCC Educational Affairs Committee approval).

The INDT program consists of one (1) full-time regular faculty on a 9-month contract and two (2) adjunct instructors. Adjunct faculty includes:

Tracy Bedell, Adjunct Professor x2931 tbedell@jccc.edu Box 17 ATB-123 (INDT-155 Workplace Skills)

Dennis Burks, Adjunct Associate Professor x4441 dburks2@jccc.edu Box 17 ATB-123 (INDT-125 Industrial Safety/OSHA-30)

The INDT program teaches vocationally-related skills which enable students to work safely in industrial or construction venues, apply and interview for employment positions, and incorporate proper workplace decorum in their chosen profession.

The INDT program courses include a diverse cross-section of students, primarily from the skilled trades and technicians - studying under the broad Industrial Technology organization category. These students typically learn best with teaching styles that incorporate hands-on, interactive, demonstration, and lab activities.

This Program Review is strictly limited to the INDT-prefix / Industrial Technology PROGRAM, and is not a review of the broad Industrial Technology ORGANIZATION; which is a combination of multiple programs, and is a subset of the JCCC Technology Division.

HandbookProgramReviewFall2014 [PDF 2,136 KB 9/16/14]

Industrial Technology [PDF 658 KB 9/16/14]

1.1 Degree Offerings Support Construction, Technology, & Railroad Degree Programs

No unique degrees are offered in the Industrial Technology (INDT-prefix) program, although the INDT-prefix courses are mandatory requirements or electives for listed degrees in the Industrial Technology organization and other organizations (example- National Academy of Railroad Sciences (NARS)).

The numerous Advisory Committees in each of the Industrial Technology organization's technical program areas emphasize safety and soft skills training as essential in successful student development, and eventual workplace success. (INDT has no program Advisory Committee.) These unique educational aspects are addressed across degree offerings in the three (3) INDT-prefix courses.

INDT supported degrees include:

Metal Fabrication (Welding)
Electrical Technology
Heating, Ventilation, and Air Conditioning (HVAC)
Automotive Technology
Computer Aided Drafting and Design Technology

Civil Engineering Technology / Construction Management (the Civil Engineering Technology (CET) degree is currently being discontinued, with only enrolled students completing their degree)
Engineering Technology
Railroad Technology
Electronics Technology
Energy Performance and Resource Management/Solar Technology (this program currently being discontinued, with only enrolled students completing their degree)
Industrial Maintenance / Automation Engineering Technology (this program currently under extensive modification with separate degree approvals pending)

The INDT-prefix courses strictly support other JCCC technical degree programs.

1.2 Certificate Offerings Support Construction, Technology, & Railroad Certificates

No unique certificates are offered in the Industrial Technology (INDT-prefix) program, although the INDT-prefix courses are mandatory requirements for listed certificates in the Industrial Technology organization and other organizations (example - National Academy of Railroad Sciences (NARS)).

The numerous Advisory Committees in each of the Industrial Technology organization's technical areas emphasize safety and soft skills training as essential in successful student development, and eventual workplace success. (INDT has no program Advisory Committee.) These unique educational aspects are addressed across certificate offerings in the three (3) INDT-prefix courses.

INDT supported certificates include:

Metal Fabrication (Welding)
Electrical Technology
Heating, Ventilation, and Air Conditioning (HVAC)
Automotive Technology
Computer Aided Drafting and Design Technology
Civil Engineering Technology / Construction Management (the Civil Engineering Technology (CET) degree is currently being discontinued, with only enrolled students completing their certificates)
Engineering Technology
Railroad Technology
Electronics Technology
Energy Performance and Resource Management/Solar Technology (this program currently being discontinued, with only enrolled students completing their certificates)
Industrial Maintenance / Automation Engineering Technology (this program currently under extensive modification with separate certificate approvals pending)

The INDT-prefix courses strictly support other JCCC technical certificate programs.

2 Program Resources INDT Historical Resource Summary and Direction

The Industrial Technology (INDT-prefix) staff is composed of one (1) full-time regular, 9-month faculty member and two (2) part-time adjunct faculty members.

Historical statistics for the INDT - Industrial Technology program include:

Student credit hours per Academic Year were:
671 hours in 2011-2012
587 hours in 2012-2013
732 hours in 2013-2014
(663.33 hours for the 3-year student credit hour average)

Enrollment per Academic Year included:
321 students in 2011-2012
275 students in 2012-2013
378 students in 2013-2014
(324.66 students for the 3-year student enrollment average)

Average class size per Academic Year was:
16 students in 2011-2012
13.8 students in 2012-2013
15.1 students in 2013-2014
(14.96 students for the 3-year average class size)

Completion rates per Academic Year remained high at:
98.1% in 2011-2012
95.3% in 2012-2013
97.1% in 2013-2014
(96.83% completion for the 3-year average student completion rate)

The average of successful student completer percentages (those scoring an A, B, C, or P) per
Academic Year were very consistent at:
91.4% for 2011-2012
91.2% for 2012-2013
91.6% for 2013-2014
(91.4% for the 3-year average percentage of successful student completers)

The percentage of attrition per Academic Year was:
1.9% in 2011-2012
4.7% in 2012-2013
2.9% in 2013-2014
(3.16% for the 3-year average in student attrition percentages)

All INDT-prefix courses were offered as "On-Campus Courses" during the data collection period,
although off-site courses (Gardener) and hybrid on-line formats were previously offered (prior to 2011).

The JCCC Industrial Maintenance degree included five (5) AAS degrees earned by students during the
3-year data collection period, and Industrial Maintenance certificates included three (3) certificates
earned by students during the 3-year data collection period. These were uniquely limited offerings
pursued primarily by students with employer support. They are currently included under the
INDT-prefix due to the lack of a separate approved prefix category for this degree and certificate.
Industrial Maintenance instruction was previously / is currently provided by faculty from a combination
of several industrial programs and disciplines, but no additional INDT-prefix courses specifically existed
/ exist to support this degree or certificate.

Five (5) JCCC students are known to currently be pursuing this specific unique Industrial Maintenance
AAS degree. Eight (8) JCCC students are known to currently be pursuing this specific unique Industrial
Maintenance certificate.

The pending Automation Engineering Technology (AET) certificate and degree are anticipated to
incorporate and expand the elements of this unique Industrial Maintenance offering. It is anticipated a
separate prefix code, cost center number, and qualified faculty dedicated to the formalizing and
teaching of the pending AET curriculum will be hired and designated for this new program.

The transition from Industrial Maintenance to Automation Engineering Technology (AET) is currently
being revised and renamed to better reflect actual industry requirements and practices, since the
profession has evolved significantly since its original inception and title. The instructional tract will be
offered as a separate JCCC Automation Engineering Technology (AET) degree or certificate. Course
outlines are currently being developed (under the leadership of the Electrical Technology -- ELTE
department chair) and approved through the Technology Division Curriculum Committee (and
eventually the JCCC Educational Affairs Committee) to establish the program. It is currently being
modified to conform with the functional areas of the Kansas state program alignment criteria.

Additional historical INDT - Industrial Technology program statistics include:

Industrial Technology (INDT) costs per credit hour per Academic Year were:
$ Not Provided in 2011-2012
$216.40 in 2012-2013 based on 587 student credit hours
$184.82 in 2013-2014 based on the 732 student credit hours
($200.61 for the 2-year cost average, based on the average of 659.5 student credit hours)

Industrial Technology (INDT) expenditures per Academic Year were:
$ Not Provided in 2011-2012
$127,028 in 2012-2013
$135,288 in 2013-2014
($131,158 for the 2-year average)

Revenue from tuition per Academic Year was:
$ Not Provided in 2011-2012
$47,581 in 2012-2013
$62,067 in 2013-2014
($54,824 tuition revenue for the 2-year average)

The KBOR calculated state share of cost at 100% per Academic Year was:
$ Not Provided in 2011-2012
$100,029 in 2012-2013
$114,499 in 2013-2014
($107,264 KBOR share for the 2-year average)

KBOR calculated state share of cost, based on the previous year's 2013 tiered rates, are reported as $52,097 for Academic Year 2013-2014.

3 Reflection on Institutional Data Industrial Technology (INDT) Reflection [Met]

The data provided by Institutional Research was consistent with informal internal program assessments. Minor fluctuations occur from one Academic Year (AY) to the next, but have remained relatively stable since development. Projections anticipate this stable trend to remain, as these INDT courses provide support and related soft-skills to other technical educational tracts. As fluctuations occur in these other supported degree and certificate programs, fluctuations also occur in the INDT-prefix courses. However, the INDT-prefix fluctuations tend to be minimized, since slight temporary enrollment decreases in one supported program area are typically offset by slight temporary increases in other supported program areas.

The existing Industrial Maintenance students (thirteen (13) declared -- four (4) as primary degrees and one (1) as secondary degree / five (5) as primary certificates and three (3) as secondary certificates) are considered as statistically insignificant to the INDT-prefix data. This is due to the limited INDT-prefix courses each of these students must complete.

Student enrollment fluctuated by 27%, based on student enrollment changes in the supported degrees and certificates. INDT student success rates were very consistent, fluctuating by only 0.4% during the 3-year period. Additionally, attrition rates were low (3.16% average for the 3 years).

Restructuring the Industrial Technology (INDT-prefix) cost center (#1229) to transfer in the Construction Safety/OSHA-30 course from Civil Engineering Technology/Construction Management (CET-150) to an INDT-prefix course is a logical and appropriate program modification. The CET-150 Construction Safety/OSHA-30 course parallels the INDT-125 Industrial Safety/OSHA-30 course, is taught by the same faculty member, and should be categorized as an Industrial Technology (INDT) initiative to more accurately reflect its content, coordinate initiatives, and capture and track Construction Safety course data.

In addition, modifying the INDT-125 Industrial Safety/OSHA-30 and INDT-150 (CET-150) Construction Safety/OSHA-30 JCCC course descriptions and outlines to better align with the most recent OSHA Terminal and Enabling Objectives for these OSHA Outreach Programs is logical, and has been recommended by the regional Director of the OSHA Educational Training Center (ETC). (Completed through the JCCC faculty member, the JCCC Technology Division Curriculum Committee, appropriate

JCCC Curriculum Specialist, and the Chair of the Educational Affairs Committee. Updates are entered in CourseLeaf, CIM, and PIM -- awaiting final approval by the full JCCC Educational Affairs Committee.)

Finally, removing the Industrial Maintenance certificate and degree from the INDT-prefix separates the proposed Automation Engineering Technology (AET) initiative with the logical program expertise and staffing; based on projected courses and curriculum.

What is NOT captured by the JCCC Institutional Research (IR) data is the unique ability for JCCC to offer the nationally-recognized OSHA-30 hour course completion cards in both General Industry (29 CFR 1910) and the Construction Industry (29 CFR 1926) to those students who successfully meet and complete the OSHA Outreach Program requirements. Having OSHA-Authorized full-time and adjunct faculty as certified trainers allow JCCC students to obtain this life-time serialized credential, along with their college credit. This concurrent credential is a very significant benefit to the student population, and unique to this program. Obtaining the 30-hour card is highly desired by employers, and OSHA recently awarded the 30-hour nationally-recognized document to the 70,000th course completer.

Workplace Skills (INDT-155) offers students guidance in resume writing, job application, interviewing techniques, and the soft skills required to be successful in the skilled trades and industry. This instruction is valuable in preparing students to meet the challenges of the marketplace.

INDT-prefix courses are not duplicated on campus, and are designed to assist students in finding employment and performing their assigned function in a safe and efficient manner. INDT-prefix courses provide the opportunity for a competitive advantage to JCCC students in career placement, performance, and potential advancement.

4 Student Success INDT Student Success Aspects

Student success in INDT-155 (Workplace Skills) is the understanding of the employment process, preparing the student to enter the job market, and providing them the confidence in making that transition from student, to applicant, to a productive employee.

Student success in INDT-125 (Industrial Safety/OSHA-30) and INDT-150 (CET-150) (Construction Safety/OSHA-30) is the recognition, avoidance, and correction of workplace hazards. This includes students working with their employers to create a safe and healthful workplace for themselves, co-workers, contractors, and visitors. The overall reduction in workplace accident and incident frequency and severity is the primary focus. This risk reduction translates into less property damage, fewer injured persons, a reduction in claims, lower direct and indirect losses, reduced worker's compensation costs, and lowered payments for state-mandated employer insurance coverage (workers compensation insurance premiums, general liability insurance premiums, errors and omissions insurance premiums, etc.).

4.1 Define Student Success Examples of INDT Student Success

The INDT-155 demonstration of student success is the navigation through the hiring, probationary period, and becoming a reliable worker for local and regional employers.

INDT-125 (and pending INDT-150) success is also working collaboratively and proactively in addressing potential workplace hazards; and being a vigilant advocate in assisting their employer in complying with the numerous applicable OSHA regulations for their specific industry.

Collectively, INDT student success translates into enhanced employer success, providing their company with a competitive market advantage locally, regionally, nationally, and internationally.

4.2 Achieve/Promote Student Success Faculty Guidance and Availability

The INDT program promotes student success by preparing lesson plans that are basic and clear, interpreting complex processes and programs into simplified steps and language, and providing real-life examples of how course content applies to a wide variety of anticipated workplace situations.

The faculty are engaged with students during class; gauging comprehension, directing learning, facilitating interaction, and answering student questions. The faculty also makes themselves available before class, on breaks, after class, during office hours, and at other times to address student questions or concerns. INDT faculty is available face-to-face, by phone, or via email.

Compliments are noted on assignments, encouragement is shared where appropriate, and one-on-one assistance is provided to promote individual and collective student success.

4.3 Successful Transfer   Internal JCCC Integration and Periodic Feedback

Although the INDT program does not directly transfer students to other educational institutions, it does return students to their selected JCCC degree or certificate programs.

The INDT-prefix faculty attempts to integrate their programs so that upon their return to their core classes; these students are better learners, have a broader vision of the employer/employee relationship, and are more mature and prepared for real-world challenges.

Exposure to non-technical elements of their specific degree or certificate compliment student understanding of business processes they will encounter following graduation.

In addition, former students and area employers periodically provide positive feedback to JCCC faculty that materials learned in the INDT-prefix courses have been THE determining factors in the hiring, retention, or promotion of these former students.

5 Assessment of Student Learning Outcomes   Feedback, Homework, and Examinations

INDT assessment of student learning outcomes are evaluated by faculty in the form of verbal and nonverbal feedback, completion of homework assignments that reinforce content being presented, and periodic examinations. Assessment is made through embedded test questions, assignments and exercises that incorporate specific course outline objectives, comments on individual assignment or in Desire2Learn (BrightSpace), and discussions surrounding targeted criteria.

These INDT assessment strategies have been informal, periodic, and typically not well-documented.

More thorough assessment strategies are being reviewed to strengthen this instructional area. A specific short-term goal has been documented which addresses a more formalized assessment of student learning outcomes.

Assessment&CurriculumChart [XLS 41 KB 9/16/14]

Copy of ProgramQuestionFileView [XLS 42 KB 10/30/14]

5.1 Reflection on table provided on assessment.   Opportunities for Improvement

Student assessment and outcome assessments have been identified for additional emphasis in AY 2014-2015, and beyond. A specific short-term goal has been developed to more formally document assessment of student learning outcomes.

5.2 Significant Assessment Findings   Confusing Federal Regulations

Although student assessment in INDT-prefix courses has been limited, one general observation will be addressed.

The most significant historical finding of student assessment is the challenge that reading and understanding the breadth, depth, and intent of the 29th Code of Federal Regulations (29 CFR Parts 1910 and 1926) presents. The textbooks used in INDT-125 Industrial Safety/OSHA-30 and INDT-150 (CET-150) Construction Safety / OSHA-30 are the OSHA CFR's, containing verbatim regulatory text.

OSHA regulations are not written in prose; where there is a theme, character, storyline, or rational sequence. The regulations are written more like 'tax codes.' Regulations have intermixed requirements, often recorded without any apparent correlation. The topics often include subject matter, machinery,

work practices, or processes that are foreign to JCCC students (example - Maritime requirements). This learning gap is compounded for younger students with limited life-experiences, no previous exposure to heavy industry or large-scale construction, and limited interest to self-research unfamiliar technologies or equipment (examples - nano-technology or 5-axis mills).

As indicated, the national OSHA-30 courses (General Industry and Construction Industry) must use the OSHA regulations as one of the student textbooks, with the Instructor serving as the interpreter of the requirements. Faculty provides both the explanation of the regulations and potential examples of various applications. This is challenging for the student and the Instructor, and has resulted in goals included in Section 8 (below) to enhance visual aids used for classroom illustration. It is expected that incorporating additional images will enhance the instruction, application, and promote learning by all participants.

5.3 Ongoing Assessment Plans Opportunities for Improvement

As previously identified, assessments of student learning outcomes are currently limited to informal methods; including feedback, homework, and exams.

A broader, more comprehensive approach to assessments is being developed for the two course categories (regulatory and soft skills), and is included as a short-term goal in Section 8 (below).

6 Curriculum Reflection Technology Division Curriculum Committee Activities

The INDT program submitted revised course outlines for INDT-125 Industrial Safety/OSHA-30 based on the most recent release of OSHA training requirements published in February 2014. They were presented to the Technology Division Curriculum Committee and entered into CourseLeaf in May 2014. At the same time, changes were made to CET-150 Construction Safety/OSHA-30 documentation, including a proposal transferring it to Industrial Technology (INDT). Both documents are complete in CourseLeaf, CIM, and PIM; and currently remain under final consideration by Educational Affairs Committee representatives.

In addition, the Industrial Maintenance degree and certificate were / are not vigorously promoted while courses are being modified. New students are not actively encouraged to designate this degree/certificate as their educational objective. These modifications include the program name being changed to Automation Engineering Technology (AET), with its own cost center (and proposed separate faculty member). This process remains at the Technology Division Curriculum Committee level while course outlines and program parameters are being finalized.

6.1 Honors Contract(s) Not Applicable

The INDT program offers no courses in an honors program.

6.2 New Course Offerings Not Applicable -- Only Modifications

No new INDT / cost center #1229 courses are planned. Only the transfer of the existing Civil Engineering Technology/Construction Management (CET) course 150 - Construction Safety/OSHA-30 to Industrial Technology (INDT) as INDT-150 is planned (and in-progress, as previously detailed).

In addition, the development of the Automation Engineering Technology (AET) degree and certificate program remains in the formative process (as previously detailed). It will eventually include new course offerings; but under a different program title, cost center, and faculty leader.

7 Faculty Success Qualified INDT Faculty

The INDT staff is well-qualified to teach their subject course materials.

The JCCC full-time faculty member is a Certified Safety Professional (CSP), worked in industry for 29 years as a Safety Engineer, and has served multiple years on the board of professional organizations. He was also selected as the local American Society of Safety Engineers (ASSE) Chapter (513 members) Safety Professional of the Year (SPY) and as the 9-state Regional SPY. He taught as an

adjunct instructor in the JCCC Electrical Technology (ELTE) program for 10 years before becoming a full-time faculty member in INDT. (He is certified as both a Block Master Electrician (Olathe) and an International Association of Electrical Inspectors (IAEI) Electrical Inspector - General. He was also previously a Certified Quality Auditor (CQA) through the American Society for Quality (ASQ) for both the ISO 9001 and 14001 standards, conducting audits in the Nuclear Security Enterprise (NSE)).

The JCCC adjunct faculty member teaching INDT-125 Industrial Safety/OSHA-30 is a Professional Engineer (PE) and also a Certified Safety Professional (CSP). He has worked approximately 34 years in industry as a Safety Engineer, and has served multiple years on the boards of professional organizations. He was also previously selected as the Chapter and 9-state Regional Safety Professional of the Year (SPY) by the American Society of Safety Engineers (ASSE).

The INDT-155 Workplace Skills Instructor has served as an adjunct faculty member at JCCC and other colleges and universities for over ten years. She has served as a business consultant to individuals, non-profits, and corporate entities for over 15 years. Her training and experience encompasses construction, railroad, vocational technical, and collegiate sports industries.
Additionally, she has business experience in both the public and private sectors which directly relates to her course content regarding preparation, application, integration, and successful retention in the workplace.

7.1 Departmental Accomplishments Recognized by OSHA During Periodic Audit

The INDT-125 Industrial Safety/OSHA-30 course was audited twice in September 2014 by the regional OSHA Training Institute (OTI) Educational Training Center (ETC) Director and staff member. Both the JCCC full-time faculty member and the adjunct faculty member teaching INDT-125 were independently evaluated. This dual evaluation was necessary due to the individual certifications required to serve as Authorized OSHA Outreach Instructors.

Both evaluations resulted in positive audit comments regarding documentation and delivery, no findings of deficiency, and no suggested opportunities for improvement from the two (2) trained OSHA auditors.

7.2 Faculty Accomplishments Technical Journal Publications

The JCCC adjunct faculty member who instructs the INDT-125 Industrial Safety/OSHA-30 class was published in 2013 in Professional Safety, the journal for the American Society of Safety Engineers (ASSE). The jointly-authored article dealt with the complicated safety issue of multi-employer worksites, and the approach used to differentiate responsibility/liability regarding safety and health issues. This was the ninth article published by the adjunct faculty member in national publications during his career.

7.3 Innovative Research, Teaching or Community Service OSHA-Recognized Instructors

Both the full-time and adjunct faculty members who teach INDT-125 Industrial Safety/OSHA-30 are recognized experts in their field. Both teach various courses at the OSHA Training Institute's (OTI) Educational Training Centers (ETC) at locations including the Business and Technology Center (BTC) at the Metropolitan Community College (MCC) in Kansas City, MO and at Red Rocks Community College in Denver, CO. Both have been presenters and keynote speakers at safety conferences, including multiple years at the annual Mid-America Environmental, Safety, and Health Conference & Exposition held at the Tan-Tar-A resort in Osage Beach, Missouri.

8 Goal Setting and Action Plan Numerous INDT Improvement Initiatives

The INDT program has identified numerous improvement opportunities to pursue, which are listed with additional detail in the section below. Although solicited, no suggested goals or action plans were identified by the INDT adjunct faculty members.

8.1 Long-term Goals Incorporate Additional Hazard Recognition Slides

In Fall 2014, JCCC purchased a commercial trainer's package for the INDT-150 (CET-150)

Construction Safety/OSHA-30 course. Although the commercial PowerPoint slides are "locked," additional slides can be inserted into the removable USB drive.

Incorporating slides that better illustrate construction site hazard recognition and avoidance is planned to make the material more interesting, visual, and better aligned with the revised learning objectives. In addition, course modifications will add visual images to increase the appeal, understanding, and application for the course participants.

Target -- On-going, but completed in Fall 2018.

General Outcomes Links

Key Performance Indicators	Campus-wide KPIs	
	4 - Student Satisfaction	(Measured by Noel-Levitz Student Satisfaction Inventory) on the following indicators: Instructional Effectiveness Registration Effectiveness Concern for Individual Academic Advising/Counseling Safety and Security

8.1.1 Actions/Resources Required IT Evaluation of Software or Time Devoted to Parallel Series

An evaluation is required (now complete) by JCCC IT software support personnel to determine if the commercial USB drive ("Archived .pps" files) can be duplicated into unlocked PowerPoint slideshows.

If they can be unlocked, unnecessary slides that refer to specific examples and exercises in the publisher's companion commercial student manuals (which are not purchased by students or used at JCCC for this class) could be removed. More importantly, additional images could be inserted directly onto the existing commercial slides to enhance their effectiveness, and completely new supplemental slides containing customized information could be inserted as appropriate into the presentations.

If the presentations could not be unlocked/duplicated by JCCC personnel, a separate parallel series of supplemental slides would be required to be developed in PowerPoint to present topical material (with appropriate visual images) to be truly effective. This second option would not enhance the quality of the commercial presentation materials, and would create unnecessary redundancies in course content materials, so it is not the preferred method.

8.1.2 Updates on Long-Term Goals Not Applicable

This is a new long-term goal. An update is not available.

8.2 Long-term Goals Blend Course Content with Desire2Learn (BrightSpace)

In Summer 2014, JCCC transitioned to Desire2Learn (D2L - now "BrightSpace") as its Learning Management System (LMS). Taking content from the commercially-purchased ManComm software, the OSHA Outreach website, and supplemental materials -- and organizing them in D2L would be beneficial to the overall program.

Target -- On-going, but completed in Fall 2018.

General Outcomes Links

Key Performance Indicators	Campus-wide KPIs	
	4 - Student Satisfaction	(Measured by Noel-Levitz Student Satisfaction Inventory) on the following indicators: Instructional Effectiveness Registration Effectiveness Concern for Individual Academic Advising/Counseling Safety and Security

8.2.1 Actions/Resources Required IT Support, Time, and Instructor Effort

The software for the Construction Safety / OSHA-30 course, purchased from ManComm, came with a single thumb drive with all PowerPoint slide shows included.

IT support is required to evaluate the thumb drive, INDT faculty update the content, and INDT faculty transfer OSHA's Outreach content to Desire2Learn (D2L).

Ongoing -- but target Fall 2018.

8.2.2 Updates on Long-Term Goals Not Applicable

This is a new long-term goal. An update is not available.

8.3 Short-Term Goals Publish Revised Course Outlines for OSHA-30 Courses

Publish revised outlines (course competencies and learning objectives) for both INDT-150 (CET-150) Construction Safety/OSHA-30 and INDT-125 Industrial Safety/OSHA-30. These revised documents will align with the most recent OSHA Outreach publications, dated February 2014.

Currently, the existing OSHA course outlines are outdated, and new outlines have been submitted through the Technology Division Curriculum Committee, entered into CourseLeaf, approved by the JCCC Curriculum Specialist, and submitted to the JCCC Educational Affairs Committee. However, the new outlines were deemed not to meet the JCCC standard used by Educational Affairs. The regional OSHA Educational Training Center (ETC) has indicated a preference that JCCC utilize the OSHA Terminal and Enabling Objectives already written and used by most OSHA-authorized programs since 1971. A decision in either direction (to use OSHA's documented outlines or re-write documents to align with JCCC Educational Affairs protocols), or a compromise somewhere in between has been reached to advance the curriculum.

Proposed course outlines that meet both the desires of the INDT OSHA Outreach Instructors and the JCCC Educational Affairs Committee have been submitted to the regional OSHA Educational Training Center (ETC). JCCC is awaiting review and approval / suggested modification from the OSHA Regional Director.

Target completion: March 1, 2015 (hopefully for implementation in Banner / the JCCC Catalog and Course Schedule beginning in Fall 2015 (or delayed until Spring 2016 if not approved during Fall Semester 2014 by the Educational Affairs Committee).

General Outcomes Links

Key Performance Indicators Campus-wide KPIs

  5 - General Education   Mastery Progressing Low or No Skills

8.3.1 Actions/Resources Required Educational Affairs Committee Approval

The revised course outlines were approved by the Technology Division's Curriculum Committee in late Spring 2014. Since then, they have been submitted to CourseLeaf, approvals obtained in CIM and PIM, and held for revision by Educational Affairs representatives.

Although the originally submitted outline contained verbatim competencies and learning objectives from OSHA training materials, these submittals apparently were not consistent with JCCC's preferred format and terminology.

A decision to adopt one format or another, or a compromise is needed to be reached to advance the program documents.

Proposed course outlines that meet both the desires of the INDT OSHA Outreach Instructors and the JCCC Educational Affairs Committee have been recently submitted to the regional OSHA Educational Training Center (ETC). JCCC is awaiting review and approval / suggested modifications from the OSHA Regional Director. No timeframe for approval has been indicated.

Target -- March 1, 2015.

8.3.2 Updates on Short-Term Goals Not Applicable

This is a new short-term goal. No update is available.

8.4 Short-Term Goals Renew OSHA Outreach Trainer Certification

Although the JCCC adjunct instructor for the INDT-125 course (Industrial Safety/OSHA-30) renewed his certification through his primary employer in June 2014 (valid for 4 years), the JCCC full-time faculty member has his General Industry Outreach Instructor Training authorization due to expire on 7/28/2015. In addition, his Construction Safety Outreach Instructor Training authorization expires on 12/1/2015.

Renewal of both certifications are required to continue offering the valuable OSHA 30-hour course completion cards to JCCC students. Instructor re-certification is valid for 4 years, and then a 3-day refresher course at the OSHA Training Institute (OTI) Educational Training Center (ETC) is required.

If a lapse occurs in the authorization, the Instructor is no longer allowed to teach the OSHA-30 hour content, to issue student credentials, and a limited 90-day grace period begins. If the refresher course is not completed during the 90-day grace period, the Instructor must pass the entire OSHA certification process again, completing the initial 4-day OSHA course and being issued a new Authorization certification.

A proposal is being prepared to re-authorize the JCCC full-time faculty member in the Summer of 2015.

Target date -- August 1, 2015.

General Outcomes Links

Key Performance Indicators Campus-wide KPIs

 3 - Persistance   Persistence Fall-to-Fall

8.4.1 Actions/Resources Required Course Scheduling and Payment

It is recommended that both the Industrial Safety/OSHA-30 and Construction Safety/OSHA-30 certifications be renewed at the local OSHA Training Institute (OTI) Educational Training Center (ETC) during the early Summer of 2015.

Although this period falls outside the full-time faculty's 9-month contract, this scheduling would require no interruption to Fall 2015 classes, and eliminates the need for substitute OSHA Authorized Instructors to substitute and cover the course while the Instructor is undergoing re-certification.

Unfortunately, the local OSHA Training Institute's (OTI) Educational Training Center (ETC) course schedule for Summer 2015 has not yet been published. Exact scheduling, pricing, and availability is unable to be determined at this time.

Target -- August 1, 2015.

8.4.2 Updates on Short-Term Goals Not Applicable

This is a new short-term goal. An update is not available.

8.5 Short-Term Goals Transfer CET-150 Course to INDT and Cost Center 1229

Ensure that the CET-150 course (Construction Safety/OSHA-30) is moved to Industrial Technology as INDT-150. This proposal has already been submitted and approved by the Technology Division's Curriculum Committee, entered into CourseLeaf, has been documented in CIM and PIM, has been

approved by impacted program Chairs, and is awaiting final approval by the JCCC Educational Affairs Committee. It's status for approval is linked to the Educational Affairs Committee's approval of revised course outlines, identified in Short-Term Goal #8.3 above.

This action of changing the course prefix from CET to INDT centralizes all safety courses under a single cost center (better tracking and cost charging), improves alignment for scheduling and administrative functions by divisional support staff, and centralizes reporting and coordination by Administration to a single Assistant Dean (who serves as the INDT Chair).

Four (4) courses which currently specify CET-150 as a required course or technical elective required modification of their documentation to specify INDT-150 instead.

Target date -- March 1, 2015 (hopefully for implementation in Fall 2015, or Spring 2016 if delayed in the Educational Affairs Committee approval process).

General Outcomes Links

Key Performance Indicators	Campus-wide KPIs	
4 - Student Satisfaction	(Measured by Noel-Levitz Student Satisfaction Inventory) on the following indicators: Instructional Effectiveness Registration Effectiveness Concern for Individual Academic Advising/Counseling Safety and Security	

8.5.1 Actions/Resources Required Approval through Educational Affairs Committee

As stated in previous Short-Term Goal #8.3 (above), the revised course outlines and transfer of CET-150 to the new prefix INDT-150 were approved by the Technology Division's Curriculum Committee in late Spring 2014. Since then, they have been submitted to CourseLeaf, effected program Chairs, input into CIM, and held for revision by Educational Affairs Committee representatives.

Although the outline contained verbatim competencies and learning objectives from OSHA training materials, these submittals apparently were not consistent with JCCC's preferred format and terminology coordinated by Educational Affairs.

A decision to adopt one format or another, or a compromise is needed to be reached to advance the program.

Recently, proposed course outlines that meet both the desires of the INDT OSHA Outreach Instructors and the JCCC Educational Affairs Committee have been submitted to the regional OSHA Educational Training Center (ETC). JCCC is awaiting review and approval / suggested modifications from the OSHA Regional Director. No timeframe for approval has been indicated.

Target -- March 1, 2015.

8.5.2 Updates on Short-Term Goals Not Applicable

This is a new short-term goal. An update is not available.

8.6 Short-Term Goals Enhance Assessment of Student Outcomes

Assessment of student outcomes is currently limited in the three (3) separate INDT (CET) courses. Informal assessments occur as described in Section #5 above.

Review the JCCC assessment options utilized by the other Industrial Technology Organization degrees and certificates, and in related programs, and develop more formalized assessment strategies and tools for INDT-prefix courses.

Target -- September 30, 2015 (following Fall Professional Development Days (PDD).

General Outcomes Links

Key Performance Indicators Campus-wide KPIs

   5 - General Education   Mastery Progressing Low or No Skills

8.6.1 Actions/Resources Required Develop and Implement Assessment Tool(s)

Attend "Assessment" sessions conducted throughout the semester and during JCCC Professional Development Days (PDD) to evaluate assessment expectations, assessment options, and develop/adopt a meaningful strategy and tool(s) to use with INDT-prefix courses.

This action may include a combination of formalizing existing informal assessment practices, to developing new measurement methods.

Target -- September 30, 2015 (following Fall Professional Development Days (PDD).

8.6.2 Updates on Short-Term Goals Not Applicable

This is a new short-term goal. An update is not available.

9 Accreditation Standards OSHA Outreach Program Requirements

To maintain Instructor Authorizations for the INDT-125 Industrial Safety/OSHA-30 courses and CET-150 (INDT-150) Construction Safety/OSHA-30 courses, the Authorized Outreach Instructors must adhere to the program requirements published by OSHA.

These requirements include topics (and their duration) that must be covered, paperwork and recordkeeping that must be prepared; and other guidance included in the Instructor training course, the OSHA program requirements document, and supplemental OSHA guidelines. Failure to follow these criteria would result in suspension of being an Authorized Outreach Instructor and elimination of the opportunity to offer this valuable national credential to JCCC students.

9.1 Specialized Accreditation Two Site Courses "Audited" by Local OSHA Training Institute

Although not a formal "accreditation," two (2) INDT-125 Industrial Safety/ OSHA-30 courses were audited by two (2) representatives of the local OSHA Training Institute (OTI) Educational Training Center (ETC) for quality assurance / quality control purposes. Both the full-time instructor and the adjunct instructor were audited, due to their separate individual credentials as Authorized OSHA Outreach Instructors.

One audit was performed on Thursday, September 25, 2014 by the OTI Director. No issues or corrective actions were identified. However, three (3) favorable remarks were noted.

The second audit was performed on Saturday, September 27, 2014 by a representative of the OTI staff. No issues or corrective actions were identified. Favorable notations were included on the evaluation worksheet.

10 Resource Request/Adjustment Budget for Slight Increase for 2015-2016

With the transfer of course instructional time from CET to INDT, the JCCC full-time Instructor time-charging may result in a budget re-allocation internal to the Industrial Technology organization. This would include miscellaneous expenses for Document Services, supplies, and the mandatory recertification for the Construction Safety/OSHA-30 and Industrial Safety/OSHA-30 OSHA Training Institute (OTI) refresher courses.

As stated in Short-Term Goal #8.4, both of the certifications to teach the Industrial Safety/OSHA-30 and Construction Safety/OSHA-30 courses expire in 2015 for the JCCC full-time faculty member. Lapses in certification are not allowed by OSHA. The 3-day refresher courses cost approximately $600.00 each, but actual costs and schedules will not be known until publication of the Educational Training Center (ETC) 2015 course schedule.

BudgetChart [XLS 2,000 KB 9/16/14]

10.1 Long-range Adjustment to Resources No INDT Adjustments Anticipated

There are no long-term INDT adjustments to resources expected.

10.2 Educational Technology Support No Educational Technology Support Anticipated

There is no INDT support anticipated to be required by Educational Technology or the Ed Tech Center (other than infrequent routine questions regarding Desire2Learn (D2L or "BrightSpace") software features / issues).

End of report