

# HENRY FORD COMMUNITY COLLEGE

## Course Syllabus

- I. **Division: Energy Technology Department, Technology Division**
- II. **Course Number and Title: MFMT 112 Technical Communication: Power-Process-Facilities (PL)**
- III. **Credit Hours: 2**
- IV. **Total Contact Hours: 32**
- V. **Prerequisites: None**
- VI. **Co-requisites: Suggested: None**
- VII. **Course Grading Scale: A-E**

### VIII. **Catalog Description:**

A basic on-line course in applied power-process-facilities fundamental communication designed to provide introductory and advanced exposure, skills and knowledge to writing and plant-oriented communications, diagramming, drawing, review and regular use of PID, CAD-type prints, piping and system prints by reading and interpreting them. The elements in the course meet or exceed the requirements of various certification agencies as required by prospective students completing the online and partially online Certificate Programs and 2-Yr Energy Technology or other Applied Science Associate Degree Programs.

### IX. **Goal Statement (Optional)**

#### X. **\*Measurable Objectives - Major Core Course Objectives**

- a) Complex data and technical materials are read, interpreted and utilized in a field situation to accomplish tasks and duties for particular technician positions. (e.g., letters, memos, email, multistep directions and instructions, reference materials, books on particular topics, visuals that support meaning such as charts, graphs, figures, diagrams, and maps).
- b) \*A high degree of focus and logic is used, providing written facts, details, and explanations grouped in a way that communicates clearly; as a technician-writer anticipates needs and concerns of the field situation and may create layout or format for particular operations, maintenance and/or specific job/position situations.
- c) \*Analyzes and interprets situations, data and system functioning and employs presentation or speaking skills with little or no preparation time or resources available; speaking is generally extemporaneous or on-demand (i.e., "responding on one's feet") to identify courses of action, corrective measures and/or safe, effective and efficient procedures.
- d) Reads, interprets, analyzes data, diagrams, schematics, CAD diagrams, scenarios, technical information, computerized monitoring and similar activities. Reports on equipment-system operation, conditions or procedures - applying skills and knowledge developed through

education, training and experience to solve problems which may be unique or difficult, having several potential causes and some similarity to prior problems but also some novel features, making them somewhat difficult to anticipate and requiring some new or innovative solutions and some solutions are guided by existing precedents or known procedures.

e) Reads, interprets, analyzes data related to administrative and plant operations and maintenance activities, and handles communications relative to maintaining high productivity and efficiency in plant operations.

## **XI. Assessment of Academic Achievement**

1. Assessment is completed by one or more of the following based upon the indication of standards and industry requirements:

- a) Written exam or multiple quizzes on specific subjects.
- b) Online quizzes, exams or exercises.
- c) Performance-based exercises, lab experiences or in-industry practical application training.
- d) Scenario or context-based exercises, activities or applications based upon field conditions or situations.
- e) Written paper, report, project or collaborative exercise.
- f) Presentation, learning object development, or creative research on specific subject/s.
- g) Proctored, supervised or real workplace experience in specific subject areas.
- h) Independent study, internship, externship or coop education experience.
- i) Other active performance-type experiences-exercises as approved by instructors.

2. Energy Technology courses and programs provide students with the capability to meet or exceed the requirements for entry and advanced level multi-functional power or process plant engineers, boiler operators or heating plant operators, building engineers, HVAC heating and cooling service technicians, instrument and control technicians, and multi-skilled maintenance technicians. All courses in each program are performance-based, practically oriented to field conditions and are designed to with assessments to ensure students meet minimum National Skills Standards and minimum mandatory critical incident workplace competencies to perform at designated field proficiency levels.

3. Courses include National Skills Standards requirements as specified by nationally recognized heating/cooling field organizations including ARI/GAMA, (Air-Conditioning & Refrigeration Institute) and as specified by internationally recognized power field organizations including NIULPE (National Institute for the Uniform Licensing of Power Engineers), VTECS (Southern Association of College and Schools), National Skills Standards, and studies by HFCC faculty currently under way or completed for the occupations included in the program. Compliance with standards for governmental agencies such as OSHA, NIOSH and local regulations and laws where applicable are included as part of instruction.

4. Where required, and within the scope of the above noted assessment techniques, assessment of student achievement (with approval) may be adjusted at the discretion of the individual instructor to satisfy specific and specialized occupational requirements as is necessary for some learners seeking to meet exacting industry standards.

## **XII. General Course Requirements and Recommendations**

1. Relative to all Energy Technology courses-programs, all learners must have accessibility to an Internet-connected, computer on a regular basis throughout the semester.
2. Learners must be computer literate entering the program having abilities for e-mail, Internet browser use, basic word processing and similar computerized activities.
3. Online learners and partially online learners must take quizzes, exams, and complete other

exercises recording them on the instructional management system at the college.

4. Curriculum integration is required in a specified course which mandates that learners in these Energy Technology courses are to complete a minimum of 8-16 Internet site visits, assignments and exercises for each course.

5. Field trips are specified by license agencies granting experience credit for education activities and are an integral part of courses when specified. Field trips must be attended or made up by learners not initially participating when scheduled.

### **XIII. Texts:**

1. Basic Writing Procedures (Course Pack)
2. Diagrams, Schematics, and Computerized Technical Materials (Course Pack)
3. or, Equivalent current texts, instructional materials and/or lab manuals.

### **XIII. Core Course Topics**

- a) Introduce the student to critical and creative thinking concepts.
- b) Identify the connection to previous writing as a refresher on the basics of writing.
- c) Provide instructive guidance on technical of correspondence and communication.
- d) Communication planning and writing processes.
- e) Principles of effective writing - put your bottom line up front.
- f) Modern technology and communication – Getting it right the first (and 2<sup>nd</sup>) time.
- g) Technical Communication-Diagrams, schematics, prints, drafting and CAD.
- h) Analyzing-Selecting the best form of technical communication – The message-Not the messenger.
- i) Practical Application problems, scenarios or exercises.

### **XV. Credit for this course can be granted through credit for prior college-level learning!**

This course is considered capable of providing college credit based upon a determination by appropriate faculty through consideration of one or more of the following: 1) field experience, 2) licenses held, 3) completing course exams and/or 4) performance sequences, and/or 5) completing a portfolio and, 6) Assessment of private trade school or other extensive college level industry training or learning by a departmental faculty member.

**Note:** Courses with the (PL) designation qualify for prior college-level learning credit evaluation, which may be granted, based upon completion of the PLACE portfolio development course MFMT 108 or through departmental exams. This course may include field-type “hands-on” experiences such as field trips, plant visits, field quests or activities which will be identified and/or included as mandatory requirements for the course depending upon license agency mandates, learner needs or program requirements, instructor-determined requirements, and/or employer requirements.

#### **Course Participation/Attendance-On-Line Courses:**

Students in Energy Technology on-line courses are expected to be involved in a minimum of one scheduled instructional activity per week. To meet this expectation, learners must make contact with the course or instructor on a weekly basis through one of the following methods:

- 1) Completing an assignment (e.g., an exam, project, etc.) in the Exam or Assignment of the course web site.
- 2) Participation in a threaded discussion in the course web site Discussion Board (e.g., commenting on a discussion question posted by the faculty, posing a question or asking a questions, providing feedback to another Learner, etc.).
- 3) Viewing instructional materials (e.g., Notes or data provided in announcements or assignments, a PowerPoint presentation prepared by faculty, a streaming audio or video presentation, etc.).
- 4) Students must use the UCompass Messaging system on the course web site to contact faculty and/or other students in the course.

**IMPORTANT!!** Students who fail to make contact within the time period of one month may be notified that they will be withdrawn or suspended from the course.

#### Assignment Submissions:

In most instances, students will be responding with completed assignments by taking an exam, entering data collected, using the Discussion Board to participate in a discussion, entering the Chat Room to participate in a "live" Chat session with the instructor and/or other students, or sending an assignment to the instructor via e-mail. Make sure when completing each assignment that you submit only one assignment at a time. Bulk (multiple) assignments will not be accepted.

#### Communication:

When you send an e-mail or "create" a new assignment or complete course work, (IMPORTANT) Use the first few lines of any communication to indicate your name, course number and section, assignment and Module Number.

#### File Format:

When sending any information in a "file" format - Save the file in RTF (Rich Text Format) in your word processor before you attach this file to your correspondence. RTF (Rich Text Format) will allow the instructor to gain quick access to any file from any word processor to speed up the grading and review process.

#### Discussion-Chat:

This course allows students to post to a Class Discussion Forum or participate in Chat Room activities. You can locate the Discussion Board forum or Chatroom by clicking on them on the left side of your Ucompass Main Screen. Discussion Forums topics provided by the instructor or students remain up most of the semester for continued access by students. Use the instructor discussion forum when a question arises or a concern or information may need to be provided. Chatroom usage may be scheduled by the instructor or may be used by

#### Tuition Refunds

Refunds on tuition and fees (except registration fees) may be obtained on all classes of fifteen-week duration officially dropped according to the following schedule:

100% 1st week of classes

50% 2nd week of classes

No tuition refunds are given after the end of the second week of classes and no exceptions are made for students who enter late. Courses of other than fifteen-week duration have differing refund schedules. Details may be obtained in the Office of the Registrar. Students receiving federal financial aid have additional refund options available to them. They should review the brochure Financial Aid Information Guide and Consumer Information Supplement, available in the Financial Aid Office.

#### XVI. Online Conduct Policy

A) Students at HFCC are expected to show respect for order, law, the personal rights of others, and the educational mission of the College, as well as to maintain standards of personal integrity.

B) Students working online will be held to the same behavioral standards as students in traditional classrooms.

Please be aware that instructors will be observing your threaded discussions with each other, and may review those discussions, commenting where appropriate with the goal of helping you to better understand the course content. Specifically, you should adhere to the following guidelines:

-Personal correspondence should be conducted elsewhere.

-Treat and respect others as you would like to be treated.

- "Flaming", an angry series of words or comments used to personally attack others who may disagree with you, is not permitted.

-Take time to review the tone, language, word choice, spelling, and grammar of any written correspondence prior to sending it. You will be judged by the quality of your work.

-HFCC's computer use policy is in effect. It can be found at <http://www2.hfcc.edu/resources/policy.htm>.

-Students are responsible for completing their own online course work.

#### XVII. Academic Dishonesty Policy on Academic Dishonesty (Cheating)

##### A) College Policy on Academic Dishonesty (Cheating)

Henry Ford Community College considers academic dishonesty to be a serious offense. It is the policy of the College that determination of and appropriate action in respect to academic dishonesty by a student shall be a matter of individual judgment by the instructor. The instructor may administer a penalty up to and including failure in the particular

course. It is the professional obligation of the faculty to enforce academic integrity in their courses. Academic dishonesty is any activity intended to improve a student's grade fraudulently.\* It includes, but is not limited to, the following:

1. Unauthorized acquisition of tests or alteration of grades (such as the stealing of tests, test keys, or grade books from faculty offices or elsewhere, or the purchasing of tests or grade books);
2. Unauthorized use of notes, books, or other prohibited materials during an examination;
3. Open cheating on an examination (such as copying from another student's paper);
4. Permitting another person to take a test in the student's place or receiving unauthorized assistance with any work for which academic credit is received;
5. Providing unauthorized assistance with any work for which academic credit is received;
6. Revision of graded work in an attempt to receive additional credit fraudulently;
7. Plagiarism (using another person's work without acknowledgment);
8. Any other conduct intended to obtain academic credit fraudulently or dishonestly.

#### B) Energy Technology Policy for Computer-Utilized, On-Line and Web-Based Courses

The following practices for students taking Energy Technology courses are considered improper and prohibited according to the Academic Dishonesty Policy or as a violation of the Copyright Act:

1) Submitting Xerographic-type copies of any work - All work should be original and submitted in original writing-printing.

2) Copying or reproducing tests or examinations for on-line courses - This material is covered by the copyright act and as such is proprietary to the instructor or the college and is NOT to be reproduced UNDER ANY circumstances.

**IMPORTANT!** Copying the exams and/or answers to written or computerized exams is considered grounds for immediate failure in the course according to the Academic Dishonesty Policy!

Assignments, student completion sheets, forms, handouts, course packs, computer links and other material provided by instructors may be copied (usually in one copy only as required) by students for their individual use in completing course activities.

3) Completing specifically identified computerized final exams or written exams with the help or assistance of another person or having another person complete work on any of your exams and submitting this work as your own.

4) Falsifying assignments, copying another person's work, or completing any worksheets, lab assignments, or required hands-on lab exercise sheets - which require actual hands-on lab or research work to be completed prior to submission.

#### XVIII. Student Support Services

**Instructional Technology & Tech Buddies** If you require assistance accessing UCompass Educator courses, please contact Instructional Technology at 313.845.9663, ext. 3, 4, or 5 or via e-mail at [signorelli@hfcc.edu](mailto:signorelli@hfcc.edu), [kolin@hfcc.edu](mailto:kolin@hfcc.edu), or [vbeaty@hfcc.edu](mailto:vbeaty@hfcc.edu).

On-campus assistance is also available in the Student Center at the Tech Buddy Desk or within Instructional Technology, Monday - Friday, 8:30 a.m. - 4:30 p.m. Instructional Technology is located on the lower level of the Learning Technology Center (same building as Campus Safety), room A-004.

#### Media Center

Located on the second floor of the Library, the Media Center is an open access computer lab where students can go to work on computer assignments, access the Internet, and/or check their e-mail. For more information, you may contact the Media Center at 313.845.6386. For more information regarding Library Services, you may phone 313.845.9606.

#### Assisted Learning Services

The Assisted Learning Services Program is designed to assist physically challenged, learning disabled, or academically disadvantaged students at Henry Ford Community College to overcome barriers to education through supportive services. In addition, the Assisted Learning Services Department also provides tutoring services to the general student population. Assisted Learning Services is located in the LRC (Learning Resources Center), north side (parking lot side) main level. For more information, you may contact the office at 313.845.9617 or for the hearing impaired 313.845.9804.

#### Learning Lab

Located on the second floor of the Learning Resource Center, the Learning Lab assist HFCC students with identifying and improving the skills needed for success in the areas of Reading, Writing, and Math. Although operation hours may slightly vary each semester generally, the Learning Lab is open Monday, Tuesday, Wednesday, Thursday, from 7:30 a.m. – 8:40 p.m., on Friday from 7:30 a.m. – 4:30 p.m., and Saturday from 9:40 a.m. – 1:40 p.m. For more information, contact the Learning Lab at 313.845.9643.