

## Syllabus

Course No.:	PPT 151
Course Name:	Process Plant Safety I
Semester:	Fall 2019
Credits:	2
Class Meetings:	COT B036: T, R 11:30-12:30 pm
Instructor:	Andrew D. Sullivan
Phone:	247-3047
Email:	Andrew.Sullivan3@msubillings.edu
Faculty Website:	<a href="http://www.msubillings.edu/cotfaculty/sullivan/">http://www.msubillings.edu/cotfaculty/sullivan/</a>
Office:	A061 – Tech Building
Office Hours:	See attached schedule.

### Required Texts and Material:

No textbooks are required for this course. All reference materials will be posted on D2L.

### Course Description:

Examines the regulatory safety programs instituted by OSHA and other regulatory agencies which are specific to the processing industry. Covers a variety of topics such as hazards, safety, personal protective equipment, emergency response and safe work practices.

### Course Goals and Objectives:

Upon successful completion of this course, students will be able to:

1. Recognize workplace hazards and implement mitigations that effectively prevent injuries.
2. Demonstrate the safe use of hand and power tools used by operators.
3. Describe worker and employer rights and responsibilities under the Occupational Safety and Health Act of 1970 (OSHA).
4. Earn an OSHA 10 outreach class completion card for General Industry if all applicable requirements are met.

### Misconduct:

Academic or personal misconduct will be managed per the procedures outlined in the [MSU Billings Student Policies & Procedures Handbook](#).

Be careful about cheating and plagiarism. Sending a classmate your electronic files is a risk. Excel and Visio are examples. I have seen several times where the same file gets handed in by two students. Copying answers in online homework is another area to watch.

Exhibit professional behavior. It is important that we provide a campus conducive to academic development. Repeated disruptive behavior will be documented and result in final grade reductions up to 10% per occurrence depending on severity.

**Cell Phones and Electronic Devices:**

Electronic devices including phones, computers, and tablets are distracting to the class and not allowed. Silenced phones are allowed if you politely step out of the room to take a call.

**Access, Assistance, and Advocacy:**

Your success in a positive, supportive, and enjoyable learning environment is my primary objective and the University's. Please let me know if there are barriers that I can help to address. We have one of the strongest support networks of any university to help. A summary of services is listed below. You can work with them directly or involve me as you prefer.

- [Academic Support Center](#). The City College branch is open M-F 9-5. Resources include tutoring and a writing center. Drop-in and by appointment. 247-3022.
- [Disability Support Services \(DSS\)](#). MSU Billings is committed to providing equal access. Please meet with me to discuss ways to ensure your full participation if you anticipate barriers. DSS will help us (247-3029, Tech Building A011).
- [TRIO/Student Support Services](#). Support for low income, first generation, and disabled students enrolled in a 4 year program (or 2+2 at City College). 657-2162
- [Native American Achievement Center](#). Advocacy and assistance for American Indian students. 657-2144
- [Student Health Services](#). Student Health Services provides medical care, mental health counseling, wellness services and education, and violence advocacy and prevention services. Located above the Academic Support Center at City College. Open M:11-2, T:9-12, W:11-2, and Th:1-5. Students can use Health Services even if they waive the student health insurance plan. 657-2153
- [Veterans Services](#). For assistance activating your VA Educational Benefits, getting access to VA assistance for tutors, or even joining the veteran student organization contact the VA Representative in the Military and Veterans Success Center, Dawn Githens, at 657-2982. For assistance on the posting of your VA Educational benefits please contact Renee Haefer in the Business Services office at 657-1707.
- [Veterans Upward Bound](#). Assistance for veterans from admission to graduation. 657-2075

**Safety:**

Some hazards can't be eliminated in a process plant or laboratory setting and must be managed to prevent serious injury. A discussion of hazards and how to mitigate them will

be part of every lab and will include safety equipment checks, personal protective equipment requirements, and training. Student responsibilities include:

- Be fully engaged so you understand the hazards and are prepared to manage them.
- Be in a suitable physical and mental state to perform safely and determine if you are prepared to engage in an activity.
- Wear all required PPE for the activity. Safety glasses are always required in the lab. No open-toe shoes are allowed in the lab.
- Perform safely and professionally. Horseplay gets people hurt.
- Follow all laboratory rules and procedures. No food or drinks in the lab is an example.

Failure to follow safety rules may result in a written warning, a failing grade for the assignment or course, or loss of laboratory privileges to protect other students. MSUB is not responsible for injury resulting from failure to follow rules or procedures.

**Attendance:**

The rules for earning an OSHA 10 hour completion card are strict and require perfect attendance for the full duration of classes where OSHA modules are discussed. The schedule for discussing these modules is indicated on the attached plan which may be adjusted to meet the needs of the class. Participants are required to complete a sign-in sheet to document attendance. Arriving late to class or leaving early will prevent eligibility for an OSHA 10 card. Earning the card or not does not impact your grade.

**Academic Issues and Grading:**

1. Late work is not accepted.
2. Final grades will be calculated according to the following scoring criteria:

Tests (average of 3 evenly split)	60%
Homework Assignments	40%

3. Grade Scale:

Grade	Percentage	GPA
A	93 - 100	4.0
A-	90 - 93	3.7
B+	87 - 90	3.3
B	83 - 87	3.0
B-	80 - 83	2.7
C+	77 - 80	2.3
C	73 - 77	2.0
C-	70 - 73	1.7
D+	67 - 70	1.3
D	63 - 67	1.0
D-	60 - 63	0.7
F	0 - 60	0.0

### Course Outline:

The following plan is a guideline that will be adjusted to meet the needs of the class.

Week	Day	Class	Material
1	Thu 09/05	1	Course Introduction / Case Study: Chemical Splash
2	Tue 09/10	2	Pre-Task Hazard Assessment
	Thu 09/12	3	Laboratory Safety
3	Tue 09/17	4	Safe Work Practices: Operator Hand Tools
	Thu 09/19	5	Safe Work Practices: Operator Hand Tools
4	Tue 09/24	6	Rodding Bleeders
	Thu 09/26	7	Safe Work Practices: Power Tools
5	Tue 10/01	8	Safe Work Practices: Power Tools
	Thu 10/03	9	Safe Work Practices: Power Tools
6	Tue 10/08	10	Test #1
	Thu 10/10	11	(OSHA 10) Introduction to OSHA (1a)
7	Tue 10/15	12	(OSHA 10) Machine Guarding (2c)
	Thu 10/17	13	(OSHA 10) Hazardous Materials (2a)
8	Tue 10/22	14	(OSHA 10) Hazard Communication (1f)
	Thu 10/24	15	(OSHA 10) Personal Protective Equipment (1e)
9	Tue 10/29	16	(OSHA 10) Walking & Working Surfaces including fall protection (1b)
	Thu 10/31	17	(OSHA 10) Fall Protection (2h)
10	Tue 11/05	18	(OSHA 10) Exit routes, emergency plans, fire prevention plans, fire protection (1c)
	Thu 11/07	19	(OSHA 10) Electrical (1d)
11	Tue 11/12	20	(OSHA 10) Industrial Hygiene (2d)
	Thu 11/14	21	Test #2
12	Tue 11/19	22	Gas Testing
	Thu 11/21	23	Lockout / Tagout
13	Tue 11/26	24	Lockout / Tagout
	Thu 11/28		Thanksgiving Holiday NO CLASSES
14	Tue 12/03	25	Permitting
	Thu 12/05	26	Permitting
15	Tue 12/10		Final Exam. 12:00-2:00pm.

# Fall 2019 Andy's Schedule

	Mon	Tue	Wed	Thu	Fri
8:00-9:00	PPT 211-001 Advanced Operations 8:00-9:00 – B036		PPT 211-001 Advanced Operations 8:00-9:00 – B036	PPT 102-101 Intro to PPT Lab 8:00-10:00 – A062	
9:00-10:00	Office Hours		Office Hours		
10:00-11:00		PPT 212-101 Advanced Ops Lab 9:10-11:10 – A062		Office Hours	Office Hours
11:00-12:00	PPT 225-001 Troubleshooting 10:20-11:20 – B036		PPT 225-001 Troubleshooting 10:20-11:20 – B036		
12:00-1:00		PPT 151-001 PPT Safety I 11:30-12:30 – B036	PPT 130-001 Diagrams 11:30-12:30 – B012	PPT 151-001 PPT Safety I 11:30-12:30 – B036	
1:00-2:00	CSCI 181 Web Design 12:40-1:40 – B056	CSCI 181 Web Design 12:40-1:40 – B056	CSCI 181 Web Design 12:40-1:40 – B056	CSCI 181 Web Design 12:40-1:40 – B056	CSCI 181 Web Design 12:40-1:40 – B056
2:00-3:00	PPT 101-001 Intro to Proc Tech 1:50-2:50 – B036	PPT 101-001 Intro to Proc Tech 1:50-2:50 – B036	PPT 101-001 Intro to Proc Tech 1:50-2:50 – B036	PPT 101-001 Intro to Proc Tech 1:50-2:50 – B036	
3:00-4:00					Office Hours
4:00-5:00	PPT 102-100 Intro to PPT Lab 3:00-5:00 – A062	Office Hours	PPT 212-100 Advanced Ops Lab 3:00-5:00 – A062	PPT 102-102 Intro to PPT Lab 3:00-5:00 – A062	