

## STEM 4891 - STEM Cooperative Education

Fall 2026 Syllabus, Section 01, CRN 44117,

Credit hours: 0

### Instructor

Holly Martin

Email: [hjmartin02@ysu.edu](mailto:hjmartin02@ysu.edu)

### Public Instructor Information

**Instructor Title:**

Professor

**Instructor Professional Qualifications:**

PhD., Chemical Engineering, Mississippi State University, 2006

B.S., Chemical Engineering, Mississippi State University, 2002

**Instructor Office Location:**

Moser 2064

**Instructor Office Phone:**

330-941-3022

### Course Description

4891. STEM Cooperative Education. Integrating the student's academic curriculum with on-the-job experiences so that they can obtain a comprehensive education based on real-world experiences. The experiential experience is jointly supervised by working professionals and a STEM mentor for a full-time assignment at approved employer. Students meet with a STEM Career, Internship & Co-op professional staff member and either a Department Chair/ Program Coordinator/designated faculty co-op advisor, and submit assignment proposal for approval, file weekly work logs for faculty mentor review. Additionally, for the student to receive credit for the course, they must also complete an academic component consisting of research and reflection in the form of a written paper and presentation. Prereq.: Junior or Senior standing, 3.00 GPA in a STEM program, 2.75 GPA overall, and approval by STEM Career's Internship & Co-op professional staff in consultation with student's Department Chair/ Program Coordinator/ designated faculty internship advisor; May be repeated multiple semesters. 0 s.h.

### Course Readings

| Group    | Title            | Author | ISBN |
|----------|------------------|--------|------|
| Optional | No Required Text |        |      |

This course allows a student to work in an industrial setting. As such, there are no required texts, but the student will likely be reading various documents as required for the position for learning and safety purposes.

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

### Schedule of Topics and Assignments

| Week of | Reading(s)                                                                                                                                                                                                   | Proposed Topic                                                                                                                                                                          | Due/To Prepare for Class |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| 8/24    | As this is an industrial work experience opportunity, there are no assigned readings from the professor. It is expected that the supervisor will provide appropriate readings as necessary for the position. | As this is an industrial work experience opportunity, there are no proposed topics from the professor. It is expected that the supervisor will cover necessary topics for the position. | Learning Objectives      |
| 8/31    |                                                                                                                                                                                                              |                                                                                                                                                                                         | Journal Entry #1         |
| 9/7     |                                                                                                                                                                                                              |                                                                                                                                                                                         | Journal Entry #2         |

---

|       |                                                                                                                                                                |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9/14  | Journal Entry #3                                                                                                                                               |
| 9/21  | Journal Entry #4                                                                                                                                               |
| 9/28  | Journal Entry #5                                                                                                                                               |
| 10/5  | Journal Entry #6                                                                                                                                               |
| 10/12 | Journal Entry #7<br>Employer Mid-Semester Evaluation                                                                                                           |
| 10/19 | Journal Entry #8                                                                                                                                               |
| 10/26 | Journal Entry #9                                                                                                                                               |
| 11/2  | Journal Entry #10                                                                                                                                              |
| 11/9  | Journal Entry #11                                                                                                                                              |
| 11/16 | Journal Entry #12                                                                                                                                              |
| 11/23 | Journal Entry #13                                                                                                                                              |
| 11/30 | Journal Entry #13<br>Site Visit (In Person or Virtual)                                                                                                         |
| 12/7  | Journal Entry #14<br>Journal Entry #15<br>Final Report<br>Final Presentation<br>Employer End of Semester Evaluation<br>Student Evaluation<br>Work Activity Log |

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.