EDMM 4910 – Multidisciplinary Senior Proposal

Course Syllabus

Instructor and
Course Coordinator: Dr. Betsy M. Aller, Associate Professor, CAPM

Office: F-227 Parkview Campus – Floyd Hall

Phone: 276-3354

E-mail: Betsy.Aller@wmich.edu

Text: All materials and handouts provided by Dr. Aller are *required* reading. Also *free.*

Catalog Data: Problem definition, project planning and scheduling, follow-up and control techniques. Results in presentation and plan for multidisciplinary senior project. This course, when completed satisfactorily with EDMM 4920, is approved as a writing-intensive course which may fulfill the baccalaureate-level writing requirement of the student's curriculum. *Prerequisite: Senior status and department approval.*

EDMM 4910 is a communication-intensive class in which students will prepare multiple documents, including a resume, a project objectives statement, a technical research review, and a final project proposal, with smaller progress reports along the way. Students also give several oral presentations. The quality assessment of this communication material will comprise the majority of the student's final average in the class. Documents will be evaluated on the basis of the demonstrated content, format, technical merit, clarity, and conventions of professional written English. Since this class, when completed satisfactorily with EDMM 4920, will serve in partial completion of the baccalaureate-level writing requirements, the student will be required to receive a minimum grade of "C" in this class to fulfill curricular graduation requirements.

EDMM 4910 fulfills the requirement for Writing Courses (Proficiency 2).

Prerequisites by Topic:

1. Working technical knowledge of appropriate domain.
2. Ability to organize and communicate ideas in written and verbal format.
3. Familiarity with word processing and presentation software.
4. Ability to coordinate and communicate with classmates and faculty.

Course Grading:

Outstanding work	A	92-100%
	BA	88-91%
Good work	B	82-87%
	CB	78-81%
Average work	C	72-77%
	DC	68-71%
Unacceptable work	D	60-67%
Failing work	E	less than 60%

Objectives

By the end of the semester the student should be able to:

1. Effectively research and communicate career objectives and goals.
2. Define problem; understand solution constraints and criteria per customer requirements.
3. Use project management tools to decompose a technical problem into manageable components, plan and track project progress.
4. Locate, evaluate, and analyze literature and resources relevant to the team's project.
5. Effectively communicate project problem, background, and plan in professional written report.
6. Act as a member of a project team with faculty advising.
7. Design and give multiple group presentations on project activities, with increasing polish.
8. Participate in at least four professional development/lifelong learning activities (over two semesters).

Performance Criteria for Objectives 1-8

Objective 1:
- Create approved resume, including multiple drafts.
- Contribute to discussions on career search strategies and activities.

Objective 2:
- Communicate goals, objectives, constraints, and deliverables of chosen project.
- Develop realistic team project scope and project plan.

Objective 3:
- Understand and demonstrate activity duration estimating techniques.
- Develop and use Gantt chart / timeline for group project.

Objective 4:
- Conduct library and online search for resources.
- Write review of technical research relevant to project components.
- Document resources using appropriate and professional citation.
- ***Demonstrate understanding of what constitutes plagiarism and consciously avoid it.***

Objective 5:
- Develop interim report outline, revised research review, and professional quality interim project report.
- Write interim report abstract.
- Write professional letter of transmittal
- Gain approval of group interim project report.

Objective 6:
- Gain approval for team and for senior design project from faculty advisors.
- Conduct self-evaluation of personal/technical strengths and weaknesses.
- Demonstrate involvement in and support for team activities.

Objective 7:
- Give interim reports and rehearsal presentations.
- Give final group presentation on project and progress to date to expanded audience.
- Demonstrate knowledge and use of presentation visuals and software.
- Attend and evaluate Senior Engineering Design Project Conference presentation(s).

Objective 8:
- Attend student professional society activities, industry tours, conferences, etc.
- Submit trip report on professional society meeting, or alternative professional activity.
- Attend and report on professional development lectures (CEAS Lecture Series, others).

Grading

Your course grade will be based on your class participation and on your written, oral, and in-class activities. Team activities will typically have both a team grade and an individual evaluation as well. The grading criteria and specifics will be discussed and identified on assignment sheets as appropriate. In general, I use the following standards in assigning letter grades (or percentage equivalents) on written material:

A
Superior
	Meets or exceeds all the **objectives** of the assignment.
	Content is mature, thorough, and accurate, and addresses audience needs.
	    ▪ **Style** is clear, accurate, and direct.
	    ▪ **Organization** and **format** make information understandable, accessible, and attractive.
	    ▪ **Mechanics** and **grammar** are correct.

B **Good**	Meets the objectives of the assignment but needs improvement in style or organization; or contains easily correctable errors in grammar, format, or content; or content is superficial.
C **Fair**	Needs significant improvement in concept, details, development, organization, grammar, or format; may be formally correct but superficial in content.
D **Marginal**	Meets some of the objectives but ignores others; content is inadequately developed or contains numerous or major errors.
E **Unacceptable**	Does not have enough information; or does something other than the assignment required; or contains major errors or excessive errors.

Assignments and Percentage Values

Resume – drafts and final (indiv.)		Required to have strong current version
Project scope and objectives (indiv.)	5	
Technical research *draft* (team / indiv.)	15	
Project interim report (team / indiv.)	15	(*includes* revision of technical research report)
Oral progress reports	8	
Dress rehearsal	10	
Final oral presentation	12	(6 team, 6 indiv.)
Meeting minutes	4	
SEDP review	3	
Peer evaluation	4	
Quizzes / exams	20	
Attendance / participation*****	4	
Lifelong learning activities	[≥ 4]	(professional quality memos submitted on *four* LL activities)

Important Expectations

*Attendance is required in this class; unexcused absences will result in loss of points. As a professional courtesy, contact me in advance if you must miss class, and take actions to make up any missed work.

This is your capstone course – the step before you officially step into the professional world. Using cell phones, texting, e-mail or internet surfing, listening to music – these are inappropriate behaviors in workplace meetings *and* in this class.

Assignment sheets are provided for all written work. Review them carefully; they provide clear expectations, criteria for grading, and valuable information about professional writing standards. You should work through multiple drafts toward final, high quality outcomes. I can provide assistance with the writing process.

Because poor grammar and mechanics are not acceptable in professional writing, you should quickly locate resources for reviewing and helping with these types of writing issues. I am happy to help.