

Application Form for General Education and Writing/Math Requirement Classification

Current Information:				
I. A.) DEPARTMENT NAME:				
B.) COURSE NUMBER, and TITLE:				
C.) CREDIT HOURS: D.) PREREQUISITES:				
E.) CURRENT CLASSIFICATION				
1. General Education Code: B C D H M N P S None				
2. Writing Requirement:				
3. Math Requirement:				
Requests:				
II. GENERAL EDUCATION A.) Requested Classification: B C D H M N P S B.) Effective Date: Fall Spring Summer (year)				
Or 1-time Approval				
III. WRITING REQUIREMENT MATH REQUIREMENT				
A.) Requested Classification E2 E4 E6				
B.) Effective Date:				
Or 1-time Approval				
C.) Assessment:				
1.) What type of feedback will be provided to the student (in reference to writing skill)?				
GradeCorrectionsDraftsOther				
2.) Will a published rubric be used?				

IV. ATTACH A DETAILED SYLLABUS

writing assignments.

	Cou	urse vide	es that offer students General Education and/or Writing Requirement credit must e clear and explicit information for the students about the classification and ements.
A.) For co		Fo	r courses with a General Education classification, the syllabus should include:
			Statement of the General Education Purpose of the Course with attention to the General Education Classification requested
			List of assigned General Education Student Learning Outcomes
			List of any other relevant Student Learning Outcomes
			List of required and optional texts
			Weekly course schedule with sufficient detail (e.g. topics, assigned readings, other assignments, due dates)
	B.)		or courses with Writing Requirement (WR) classification, the syllabus should clude:
			"The Writing Requirement ensures students both maintain their fluency in writing and use writing as a tool to facilitate learning."
			"Course grades now have two components: To receive writing credit, a student must receive a grade of "C" or higher and a satisfactory completion of the writing component of the course."
			A statement or statements indicating that the instructor will evaluate and provide feedback on the student's written assignments with respect to grammar, punctuation, usage of standard written English, clarity, coherence, and organization
			Assignment word counts, page lengths, submission deadlines and feedback dates
		itio	nally, the syllabus must clearly show that the course meets the WR to Evaluate [2,000/4,000/6,000] written words in assignments during the semester

VI. SUBMISSION AND APPROVALS		
Department Contact: Contact Name:		_
Phone	Email	-
College Contact: College Name:		
College Contact Name:		
Phone	Email	_

EML 3301C: Mechanics of Materials Laboratory

(Modifications to this syllabus may be required during the semester. Any changes to the syllabus will be posted on the course web site and announced in class.)

- 1. **Catalog Description**: Experimental characterization of the mechanical properties of engineering materials, precision instruments, computer based data acquisition, statistical uncertainty analysis, preparation of engineering reports. Credits: 3
- 2. **Pre-requisites**: EGM3520, EGM3344, ENC2210 or ENC 3254
- 3. **Course Objectives**: In this course you will develop a working knowledge of experimental techniques and equipment commonly used in engineering practice. You will become familiar with the design and implementation of various sensors, statistical data analysis, experimental planning and computer based data acquisition. You will also refine your report writing and oral presentation skills.

4. Contribution of course to meeting the professional component:

- A. EML3301C supports several program outcomes enumerated in the Mission Statement of the Department of Mechanical and Aerospace Engineering. Specific ME and ASE program outcomes supported by this course include: (1) Using knowledge of chemistry and calculus based physics with depth in at least one of them; (2) Be familiar with statistics and linear algebra.
- B. Mathematical Sciences (15%), Physical Sciences (15%), Engineering Sciences (70%)

5. Relationship of course to program outcomes:

- Apply knowledge of mathematics, science, and engineering
- Design and conduct experiments, as well as analyze and interpret data
- Design a system, component, or process to meet desired needs
- Function on multidisciplinary teams
- Identify, formulate, and solve engineering problems
- Communicate effectively
- Use the techniques, skills, and modern engineering tools necessary for engineering practice

6. Instructors:

Anup Pandkar

- Office location: NEB 257 (New Engineering Building)
- E-mail address: apandkar@ufl.edu (preferred mode of correspondence)
- Telephone: 352-846-3023
- Course Web site: http://lss.at.ufl.edu
- Office hours: TBD (see course website) (NEB 109 or 257)

Shannon Ridgeway

Office location: 300B MAE-B
 E-mail address: scer@ufl.edu

• Telephone: 392-1932

Course Web site: http://lss.at.ufl.edu
 Office hours: TBD (see course website)

Teaching Assistants: TBD (see course website)

• Note that sufficient teaching assistants are assigned to the course to ensure that lab reports are grading for both technical content and the writing requirement content. The teaching assistants are trained at the start of each semester in coordination with the UF Writing Program to ensure rigor is maintained when implementing the writing requirement grading rubric.

7. Meeting Times and Location by Section:

• Lecture: T/R 3; Building / room MAEA / 303

• Lab Sections: Time varies by section; Building / room NSC / 316

8. Materials and Supply Fees: \$129.01

9. **Textbooks Required**: None. Instructor prepared material is available for download on the course web site.

10. Course Details:

The course web site, accessible through e-learning (http://lss.at.ufl.edu) via your Gatorlink login, will be the primary point of contact and support for the students. Course announcements, class discussions, laboratory assignments, and grades will be posted on the course website.

Assignments:

- Laboratory reports: A laboratory report is associated with most laboratory class meetings. Each assignment will be posted on the Canvas course website *before* the laboratory class dealing with the material topic occurs. Assignments will also be submitted via the course website and will be due according to the date shown on the website. Assignment format will be covered in class and an example will be provided. Work submitted that is not readable will receive a zero. The format is to follow published formatting rules available on the class website. The reports are to be a minimum of 2000 words each. A maximum length may be set in the lab report assignment. Discussion items detailed in the lab assignment are to be covered in the report. An overall grade will be assigned to the report work, and the average of the overall lab report grade makes up 40% of the course grade. A writing component grade will also be assigned, as detailed in sections 12/13.
- **Homework/Quiz/Pre-lab**: The Homework/Quiz/Pre-lab grade will be used to address issues as they arise. Any pre-labs assigned must be completed before lab work starts (you may not be allowed to enter the lab if the work is not finished).
- Exams: Two in class exams will be administered. The exams may be changed to evening exams, TBD.
- **Final design report**: A report will be submitted detailing the work done for the final project. The report is to follow published formatting rules available on the class website, and cover instructions provided in the final project assignment posted on the class website.

<u>Late assignments will not be accepted for any reason.</u> In addition, <u>there will be NO scheduled make-up laboratories.</u> It is the student's responsibility to honor and respect the given deadlines and meeting times.

11. **Draft Course Schedule:**

Week	Title	Topic	Assignment	Due	Feed- back
1 8/24 - 8/30	Drop-Add, Intro to Data Acquisition LabVIEW and OOTB DAQ	LabVIEW Installation			
2	LabVIEW Programming	Modern Instrumentation	Lab-1		
8/31 - 9/6	Uncertainty	Data Analysis	Report		
3	Analog circuits	Wheatstone Bridges	(LR -1)		
9/7 - 9/13	Uncertainty		2000 words		
4	Strain Gages , Beam Theory	Mounting Strain Gages	Lab-2	LR	
9/14 - 9/20	Measurment Instruments		Report	1	
5	Monte-Carlo	Instrumented Cantilever	(LR-2)		
9/21 - 9/27	Lab 2 Discussion		2000 words		
6	Fun 4			LR	LR
9/28 - 10/4	Exam-1			2	1
7	Tensile test theory (MoM	Tensile Testing of Metals	Lab-3		
10/5-10/11	Review)	Wire (LVDT)	Report		LR
8		_	(LR-3)		2
10/12 - 10/18	Lab 3 Discussion	Instron	2000 words		
9			Lab-4	LR	
10/19 - 10/25	Beam Properties / Adhesives	Adhesives, Flexural Testing	Report	3	
10			(LR-4)		
10/26 - 11/1	Beam Properties / Adhesives	Adhesives, Flexural Testing	2000 words		
11			2000 110103	LR	LR
11/2 - 11/8	Final Project intro	Open Lab		4	3
12 11/9 - 11/15	Final Project discussion	Open Lab			LR
13 11/16 - 11/22	Final Project discussion	Open Lab			4
14 11/23-	Thanksgiving break	Thanksgiving break			
15	Exam-2 review	Final Project testing			
11/31 - 12/6	Exam-2	Final project testing			
16 12/7 - 12/13		Project report due 12/10	Final project due 12/10	FP	

See schedule maintained at https://lss.at.ufl.edu/

12. Writing Requirement:

The writing assignments/student products for this course are designed to meet the minimum requirements of the University Writing Requirement credit of **6,000 words**. To satisfy this requirement, at least three of the four lab report assignments must meet minimum word count and be marked Satisfactory based on the Writing Rubric. Submitted assignments short of the minimum word count will receive zero credit for the writing component grade.

The writing requirement ensures students both maintain their fluency in writing and use writing as a tool to facilitate learning. Course grades have two components: To receive writing credit, a student must receive a grade of "C" or higher and have a satisfactory completion of the writing component of the course.

The instructor will evaluate and provide feedback on the student's written assignment in accordance with both the UF writing rubric and the course content rubric for that particular assignment, including, but not limited to, grammar, punctuation, usage of standard written English, clarity, coherence, and organization.

Below is the writing rubric which will be used to judge mechanics and flow of the written student product. Each student product will also carry a content based rubric. The student products carry two grades, one for the writing mechanics, and one for the content mechanics. Students must satisfactorily meet both rubrics for a passing assignment.

	SATISFACTORY (Y)	UNSATISFACTORY (N)
CONTENT	Papers exhibit at least some evidence of ideas that respond to the topic with complexity, critically evaluating and synthesizing sources, and provide at least an adequate discussion with basic understanding of sources.	Papers either include a central idea(s) that is unclear or off- topic or provide only minimal or inadequate discussion of ideas. Papers may also lack sufficient or appropriate sources.
ORGANIZATION AND COHERENCE	Documents and paragraphs exhibit at least some identifiable structure for topics, including a clear thesis statement but may require readers to work to follow progression of ideas.	Documents and paragraphs lack clearly identifiable organization, may lack any coherent sense of logic in associating and organizing ideas, and may also lack transitions and coherence to guide the reader.
ARGUMENT AND SUPPORT	Documents use persuasive and confident presentation of ideas, strongly supported with evidence. At the weak end of the Satisfactory range, documents may provide only generalized discussion of ideas or may provide adequate discussion but rely on weak support for arguments.	Documents make only weak generalizations, providing little or no support, as in summaries or narratives that fail to provide critical analysis.

STYLE	Documents use a writing style with word choice appropriate to the context, genre, and discipline. Sentences should display complexity and logical sentence structure. At a minimum, documents will display a less precise use of vocabulary and an uneven use of sentence structure or a writing style that occasionally veers away from word choice or tone appropriate to the context, genre, and discipline.	Documents rely on word usage that is inappropriate for the context, genre, or discipline. Sentences may be overly long or short with awkward construction. Documents may also use words incorrectly.
MECHANICS	Papers will feature correct or error-free presentation of ideas. At the weak end of the Satisfactory range, papers may contain some spelling, punctuation, or grammatical errors that remain unobtrusive so they do not muddy the paper's argument or points.	Papers contain so many mechanical or grammatical errors that they impede the reader's understanding or severely undermine the writer's credibility.

13. Writing Resources, Style, and Format:

- Reports for this course will follow the format posted on the class website.
- The writing style manual by Alley is recommended for student use:

The Craft of Scientific Writing by Michael Alley, 3rd Edition, Springer, 1998. This writing reference may also be accessed online at http://www.writing.engr.psu.edu/csw.html.

• Students are also encouraged to utilize the university's Writing Studio for assistance as needed. More information on the Writing Studio is available at this link: www.writing.ufl.edu.

14. Assessment Methods and Grading: Your course score will be calculated as follows:

40% Laboratory reports 5% Homework/quiz/pre-lab* 40% Exam

15% Final design report **Total grade**

^{*} Any pre-labs assigned must be completed before lab work starts (you may not be allowed to enter the lab if the work is not finished).

15. Grading Scale:

93-100 = A	80-82.9 = B-	67-69.9 = D+
90-92.9 = A-	77-79.9 = C+	63-66.9 = D
87-89.9 = B+	73-76.9 = C	60-62.9 = D-
83-86.9 = B	70-72.9 = C-	<60 = E (failing grade)

Questions regarding grades must be brought to your lab instructor within 7 days after return of the paper to the class. A typed note explaining your concern/issue must be stapled to the front of the paper when it is brought for reconsideration.

Information regarding letter grades and associated grade points may be found at: http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html

For more information on grades and grading policies, please visit: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

- 16. **Attendance and Expectations**: Each student is responsible for all material covered in the lectures and laboratory classes. The student is responsible for knowing all announcements made during class even if they do not explicitly appear on the syllabus. Regular attendance and participation is strongly encouraged as this is necessary to complete the class assignments. During class, cell phones must be turned off.
- 17. **Make-up Policy:** No late assignments will be accepted. Makeup exams are not normally allowed. If you cannot attend an exam or cannot meet a due date, you must contact the instructor prior to the exam or due date. Arrangements will be made for students on a case by case basis. (Failure to contact the instructor prior to the exam or assignment prior to the due date will result in a zero on that exam/assignment.)

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

- 18. **Honesty Policy**: All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a UF student and to be honest in all work submitted and exams taken in this course and all others.
- 19. **Accommodation for Students with Disabilities**: Students requesting classroom accommodation must first register with the Dean of Students Office. That office will provide the student with documentation that he/she must provide to the course instructor when requesting accommodation.
- 20. **UF Counseling Services**: Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:
 - UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, psychological and psychiatric services.
 - Career Resource Center, Reitz Union, 392-1601, career and job search services.
- 21. **Software Use**: All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

22. **Teaching Evaluations** - Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu.