FAU

FLORIDA ATLANTIC UNIVERSITY

NEW COURSE PROPOSAL
Undergraduate Programs

Department Ocean and Mechanical Engineering

College COECS

*(To obtain a course number, contact **erudolph@fau.edu**)*

UUPC Approval _____
UFS Approval _____
SCNS Submittal _____
Confirmed _____
Banner Posted _____
Catalog _____

Prefix EML **Number** 4450	*(L = Lab Course; C = Combined Lecture/Lab; add if appropriate)* **Lab Code**	**Type of Course** Lecture	**Course Title** Introduction to Energy Conversion Processes and Systems

Credits *(Review Provost Memorandum)*: 3

Effective Date *(TERM & YEAR)*: Fall 2020

Grading *(Select One Option)*: Regular (●) Pass/Fail ( ) Sat/UnSat ( )

Course Description *(Syllabus must be attached; Syllabus Checklist recommended; see Guidelines)*

Introduction to principles, theories, and processes of devices and systems that convert thermal, chemical, solar, biological and electromagnetic energy to electrical, mechanical, and alternative chemical forms. Energy conversion performance characteristics and sources of inefficiencies are explored for a variety of applications that include conventional fossil energy combustion based systems, solar, wind, hydro, biomass, thermoelectric, and geothermal energy systems. Some interesting topics including CO2 capture and storage and fuel cells are also discussed

Prerequisites, with minimum grade*	**Corequisites**	**Registration Controls** *(Major, College, Level)*
	EML 3701 Fluid Mechanics	Major

Minimum passing grade is C. Prereqs., Coreqs. & Reg. Controls are enforced for all sections of course

WAC/Gordon Rule Course

( ) Yes (●) No

WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to proposal. See WAC Guidelines.

Intellectual Foundations Program (General Education) Requirement *(Select One Option)*

None

General Education criteria must be indicated in the syllabus and approval attached to the proposal. See GE Guidelines.

Minimum qualifications to teach course

M.S. degree in related engineering field

Faculty Contact/Email/Phone	**List/Attach comments from departments affected by new course**
Myeongsub Kim/kimm@fau.edu/561-2973442	None

Approved by	***Date***
Department Chair Myeongsub Kim	11/21/2019
College Curriculum Chair	
College Dean	
UUPC Chair	
Undergraduate Studies Dean	
UFS President	
Provost	

Email this form and syllabus to mjenning@fau.edu seven business days before the UUPC meeting.