General Instructions

Academic Policies and Procedures Committees

PROPOSAL FORM -- Part A

○ Graduate AP&P ○ Undergraduate AP&P ◉ Both (Dual-Listed Courses) Submit simultaneously	Department/Program Proposal # GU_FAA_STBE_2019_03 Proposed Effective Date: FALL (year) 2020

College/Unit F&A Assoc. Dean Dr. Garner Dewey Proposer(s) Jeremy Ferrell / Brain Raichle

Department/Program STBE/Sustainable Technology Chair Brian Raichle

1. I want to: Change (Complete Part A) Course Briefly describe the action(s) requested:

In the Undergraduate Bulletin, rename the course TEC 4633 - Photovoltaics II as TEC 4633 - Battery-Based PV Systems

In the Graduate Bulletin, rename the course TEC 5633 - Photovoltaics II as TEC 4633 - Battery-Based PV Systems

2. Rationale for this request:

The original naming convention of our photovoltaics sequence: PV 1 and PV 2, is proving to be too inflexible. Specifically, content of PV 2 is not necessary for success in the proposed new courses PV 3 and PV 4. Maintaining the sequential naming convention would be confusing for students.

3. a. List the current catalog copy (including dual- or cross-listed information, if applicable). Attach separate sheet if more space needed.

See attached.

b. List the proposed catalog copy (including dual- or cross-listed information, if applicable). Attach separate sheet if more space needed.

See attached.

c. Other REQUIRED attachments: see ***General Instructions***

4. List the committees, councils, and other groups that have considered this proposal; the action taken; and the date that action was taken.

Area	Action			Date of Action m/d/yyyy
	approved	not approved	not applicable	
Department/Program Faculty (undergraduate)	☑	☐	☐	10/17/19
Department Graduate Faculty (graduate)	☑	☐	☐	10/17/19
College Council(s)	☑	☐	☐	12/5/19
General Education Council	☐	☐	☑	
Council on Professional Education	☐	☐	☑	
Honors Council	☐	☐	☑	
Undergraduate Academic Policies & Procedures Committee	☐	☐	☐	1/15/20
Graduate Academic Policies & Procedures Committee	☐	☐	☐	1/27/20

5. Contact the Registrar's Office and (for graduate proposals) Graduate School.

Area	Person Contacted	Review Comments	Date of Comments m/d/yyyy
Registrar's Office	Eric Berry, Sr. Assoc. Registrar	Supportive	11/25/2019
Graduate School	Marie Hoepfl, Assoc Dean, Grad	Support	11/21/2019

6. a. Please search the current online bulletin for courses and programs of study affected by this proposed change, including any in your own department. List each course and program in the appropriate table below or, if applicable, choose none. Attach a separate spreadsheet if necessary. (Click here for instructions on searching Online Bulletin.)

None ☐ Course(s) Affected (number & title)

None ☐ Program(s) Of Study Affected (program code & title)
BS_571A Sustainable Technology
MS_599B Technology: Appropriate Technology
MS_599F Technology: Renewable Energy Engineering
MS_599H Technology: Public Health Nutrition Practice

b. List all affected department chairs/program directors (including those from 6a as well as those whose programs may be impacted in ways other than listed above) who have been consulted in the development of this proposal and their response in support or opposition to the proposal. Use of another unit's course requires approval from that unit.

Name	Department/Program	Response	Date of Response m/d/yyyy
Jason Miller	STBE, Building Science	Support	10.17.2019
Jeff Ramsdell	STBE, Graduate	Support	10.17.2019

7. If changing a course number or adding a course, is the proposed course equivalent to an existing course in Banner?
yes ○ no ◉ n/a ○ (*If yes, list the existing and proposed equivalent course below*)

Existing Course		Proposed Course	

8. Is this a General Education course? yes ○ no ◉ n/a ○ *(If requesting new general education credit, submit Part C of the AP&P form with an attached syllabus to the Office of General Education)*

9. App State Online:
   a. Does this proposal affect a course or requirement of a distance education program? yes ○ no ◉ If yes, has App State Online been consulted? yes ○ no ○ If yes, list the date(s), App State Online contact person, and their response in support or opposition to this proposal:

   b. Mode of delivery: fully online ○ site-based ○
   If you are not sure, contact App State Online.

Current Descriptions

TEC 4633 - Photovoltaics II (3)

When Offered: Fall; Spring.

Battery-based photovoltaic (PV) systems are used in a wide variety of applications including off-grid homes, small standalone lighting systems, back-up power systems at remote telecommunications sites, village micro-grid systems, and PV powered RVs and boats. This course focuses on components utilized in battery-based systems, including PV panels/arrays, batteries, charge controllers, generators, inverters, and inverter/chargers; and examines how they are integrated and configured for different applications. This design-based course focuses on detailed system sizing calculations, equipment selection criteria, and strategies for all types of battery-based PV systems. Lecture two hours, laboratory two hours.

Prerequisite: TEC 3609.

[Dual-listed with TEC 5633.] Dual-listed courses require senior standing.

TEC 5633 - Photovoltaics II (3)

When Offered: Fall, Spring

Battery-based photovoltaic (PV) systems are used in a wide variety of applications including off-grid homes, small stand-alone lighting systems, back-up power systems at remote telecommunications sites, village micro-grid systems, and PV-powered RVs and boats. This course focuses on components utilized in battery-based systems, including PV panels/arrays, batteries, charge controllers, generators, inverters, and inverter/chargers; and examines how they are integrated and configured for different applications. This design-based course focuses on detailed system sizing calculations, equipment selection criteria, and strategies for all types of battery-based PV systems. Content mastery and applied practice at the graduate level is expected. Lecture two hours, laboratory two hours.

[Dual-listed with TEC 4633.]

Proposed Descriptions

TEC 4633 - Battery-Based PV Systems (3)

When Offered: Fall; Spring.

Battery-based photovoltaic (PV) systems are used in a wide variety of applications including off-grid homes, small standalone lighting systems, back-up power systems at remote telecommunications sites, village micro-grid systems, and PV powered RVs and boats. This course focuses on components utilized in battery-based systems, including PV panels/arrays, batteries, charge controllers, generators, inverters, and inverter/chargers; and examines how they are integrated and configured for different applications. This design-based course focuses on detailed system sizing calculations, equipment selection criteria, and strategies for all types of battery-based PV systems. Lecture two hours, laboratory two hours.

Prerequisite: TEC 3609.

[Dual-listed with TEC 5633.] Dual-listed courses require senior standing.

TEC 5633 - Battery-Based PV Systems (3)

When Offered: Fall, Spring

Battery-based photovoltaic (PV) systems are used in a wide variety of applications including off-grid homes, small stand-alone lighting systems, back-up power systems at remote telecommunications sites, village micro-grid systems, and PV-powered RVs and boats. This course focuses on components utilized in battery-based systems, including PV panels/arrays, batteries, charge controllers, generators, inverters, and inverter/chargers; and examines how they are integrated and configured for different applications. This design-based course focuses on detailed system sizing calculations, equipment selection criteria, and strategies for all types of battery-based PV systems. Content mastery and applied practice at the graduate level is expected.

Lecture two hours, laboratory two hours. [Dual-listed with TEC 4633.]