

Term Information

Effective Term Spring 2023

General Information

Course Bulletin Listing/Subject Area Food Science & Technology
Fiscal Unit/Academic Org Food Science & Technology - D1156
College/Academic Group Food, Agric & Environ Science
Level/Career Undergraduate
Course Number/Catalog 3110
Course Title Alternative Packaging for a Greener Planet
Transcript Abbreviation AltPackagGrnPlanet
Course Description This Sustainability course focuses on the dependence of humans on earth and environmental systems through the lens of alternative packaging. Plastic packaging accounts for >30% of global plastic consumption. Sustainable alternatives to current packaging methods are urgently needed. This course addresses sustainability through the dimensions of engineering, technology, and design.
Semester Credit Hours/Units Fixed: 4

Offering Information

Length Of Course 14 Week
Flexibly Scheduled Course Never
Does any section of this course have a distance education component? No
Grading Basis Letter Grade
Repeatable No
Course Components Lecture, Recitation
Grade Roster Component Lecture
Credit Available by Exam No
Admission Condition Course No
Off Campus Never
Campus of Offering Columbus, Lima, Mansfield, Marion, Newark, Wooster

Prerequisites and Exclusions

Prerequisites/Corequisites Sophomore standing or above.
Exclusions
Electronically Enforced Yes

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code 01.1001
Subsidy Level General Studies Course
Intended Rank Sophomore, Junior, Senior

Requirement/Elective Designation

Sustainability

Course Details

Course goals or learning objectives/outcomes

- Engage in critical and logical thinking about the complexity and shortcomings of sustainability in the current packaging industry, as well as sustainable packaging alternatives.
- In a team setting, propose new sustainable options for packaging to substitute into the current industry line while meeting producer and consumer expectations
- Identify, describe, and synthesize key challenges and hurdles to introducing sustainable materials from renewable sources into the packaging system, as well as key challenges of end-of-life materials.
- Justify packaging testing and analysis to achieve desired final properties.
- Determine biopolymer characteristics and describe the capabilities needed to meet the demands of specific packaging goals.

Content Topic List

- Challenges in producing sustainable materials with equivalent properties to those of petroleum based plastics
- Factors influencing scale up production of alternative packaging
- Key factors that play a role in life cycle analysis of packaging
- Economic barriers to current packaging replacement
- Policy hurdles to sustainable packaging solutions
- Consumer demands and expectations of sustainable packaging
- Waste utilization
- End of Life opportunities

Sought Concurrence

Yes

Attachments

- FDSCTE 3110 interdisciplinary-team-taught-inventory.pdf: Team Taught Inventory
(Other Supporting Documentation. Owner: Davis, Molly Jane)
- FDSCTE 3110 submission-sustainability.pdf: Sustainability Theme
(Other Supporting Documentation. Owner: Davis, Molly Jane)
- FDSCTE 3110_Ohio_State_Course_Review_Concurrence_Forms_Combined.pdf: Concurrence Forms Combined
(Concurrence. Owner: Davis, Molly Jane)
- Concurrence Contact List.docx: Concurrence Contact List
(List of Depts Concurrence Requested From. Owner: Davis, Molly Jane)
- FDSCTE 3110 Alternative Packaging for a Greener Planet Syllabus_9-7.docx: Syllabus
(Syllabus. Owner: Davis, Molly Jane)

Comments

- Attach correct syllabus

Revise as per COAA via email message 27 August 2022

Revise as per email message sent 15 July 2022 *(by Osborne, Jeanne Marie on 09/07/2022 04:15 PM)*

- revised per email 8/26/22 *(by Davis, Molly Jane on 09/07/2022 04:02 PM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Davis, Molly Jane	07/08/2022 12:54 PM	Submitted for Approval
Approved	Rodriguez-Saona, Luis Enrique	07/08/2022 12:55 PM	Unit Approval
Revision Requested	Osborne, Jeanne Marie	07/15/2022 10:52 AM	College Approval
Submitted	Davis, Molly Jane	07/18/2022 10:39 AM	Submitted for Approval
Approved	Rodriguez-Saona, Luis Enrique	07/18/2022 12:18 PM	Unit Approval
Revision Requested	Osborne, Jeanne Marie	08/26/2022 05:21 PM	College Approval
Submitted	Davis, Molly Jane	09/07/2022 04:02 PM	Submitted for Approval
Revision Requested	Osborne, Jeanne Marie	09/07/2022 04:15 PM	Unit Approval
Submitted	Davis, Molly Jane	09/07/2022 04:20 PM	Submitted for Approval
Approved	Rodriguez-Saona, Luis Enrique	09/07/2022 05:59 PM	Unit Approval
Approved	Osborne, Jeanne Marie	09/08/2022 11:18 AM	College Approval
Pending Approval	Cody, Emily Kathryn Jenkins, Mary Ellen Bigler Hanlin, Deborah Kay Hilty, Michael Vankeerbergen, Bernadette Chantal Steele, Rachel Lea	09/08/2022 11:18 AM	ASCCAO Approval

Alternative Packaging for a Greener Planet Syllabus

FDSCTE 3110 Spring 2023

Course Information

- **Course times and location:** Two 110-minute lectures; one 55-minute recitation per week
- **Credit hours:** 4
- **Mode of delivery:** In person

Instructors

Primary Instructor:

- **Name:** Yael Vodovotz Food Science and Technology (FST) (CFAES)
Email: Vodovotz.1@osu.edu
- **Phone Number:** 614-247-7696
- **Office location:** 227 Parker Food Science Bldg.
- **Office hours:** TBD
- **Preferred means of communication:**
 - My preferred method of communication for questions is **email**.
 - My class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check your [notification preferences](https://go.osu.edu/canvas-notifications) (go.osu.edu/canvas-notifications) to be sure you receive these messages

Instructional Team Members:

David Nagib, Chemistry and Biochemistry
 Email: nagib.1@osu.edu
 Phone: 614-688-1060
 283 CBEC Building
 Office hours: TBD

Chris Simons, FST
 Email: simons.103@osu.edu
 Phone: 614-688-1489

Katrina Cornish, Horticulture and Crop Science
 Email: cornish.19@osu.edu
 Phone: 330-263-3982
 108A Williams Hall, Wooster Campus
 Office hours: TBD

Emmanouil Chatzakis, FST
 Email: chatzakis.1@osu.edu
 Phone: 614-688-2731



315 Parker Food Science and Technology
Building
Office hours: TBD

233 Parker Food Science and Technology
Building
Office hours: TBD

Ajay Shah, Food Agricultural and Biological
Engineering
Email: shah.971@osu.edu
Phone: 330-263-3858
110 FABE
Office hours: TBD

Teaching Assistant

- **Name:** TBD
- **Email:** TBD
- **Recitation times:** TBD

Course Prerequisites

Sophomore standing or above.

Course Description

This Sustainability course focuses on the dependence of humans on earth and environmental systems through the lens of alternative packaging. Plastic packaging accounts for >30% of global plastic consumption. Sustainable alternatives to current packaging methods are urgently needed. This course addresses sustainability through the dimensions of engineering, technology, and design.

Currently, more than 99% of plastic packages are made from petroleum-based polymers and persist in the environment for hundreds of years. More than 50% of these plastic packages are used only once before disposal. Plastic recycling faces many challenges, such as pigmented plastics, multilayered and mixed plastics, hard-to-remove residues, and marginal markets. As a result, less than 10% of plastics are recycled, ~ 10% are incinerated, and ~80% end up in landfills. Around 3% of all the plastics on the market end up in the ocean, with up to 36% of these being microplastics. By now, over 6 billion metric tonnes (Mt) of plastic waste in total has accumulated worldwide, causing great environmental concerns.

These staggering statistics will paint the background for this course. Students will learn about the environmental burden of current packaging practices as well as the challenges and key parameters required to meet more sustainable solutions. Such alternatives face various hurdles that transcend science, policy, and human factors. A team of faculty experts will integrate their distinctly separate areas of expertise, model a diverse academic exchange, and demonstrate the interdisciplinary nature of the course.

This course will address the following interdisciplinary topics:

1. Challenges in producing sustainable materials with equivalent properties to those of petroleum based plastics (Yael Vodovotz, David Nagib)
2. Factors influencing scale up production of alternative packaging (Katrina Cornish)
3. Key factors that play a role in life cycle analysis of packaging (Ajay Shah)
4. Economic barriers to current packaging replacement (Ajay Shah)
5. Policy hurdles to sustainable packaging solutions (Ajay Shah)
6. Consumer demands and expectations of sustainable packaging (Chris Simons)
7. Waste utilization (Katrina Cornish, Emmanouil Chatzakis)
8. End of Life opportunities (Katrina Cornish, Yael Vodovotz)

As part of the course, students will work in groups to propose viable more sustainable alternatives to specific current packaging uses where they will integrate knowledge learned in class with independent research and personal experiences. A keen appreciation of the challenges and rewards of finding feasible, economically viable solutions will enhance the students' perspective of plastics and packaging.

Faculty Team and Expertise

This course is set to understand the large, complex issues that are involved in shifting to more sustainable packaging options. Students will examine this problem from multiple disciplinary perspectives, including various STEM fields such as engineering, chemistry, microbiology, and food science, as well as through the lenses of policy, human factors, consumer behavior, and legislation. The topics that will be covered and the faculty experts teaching those sections and their respective departments include: challenges in producing sustainable materials with equivalent properties to those of petroleum-based plastics (Yael Vodovotz (FST), David Nagib (Chem)); factors influencing scale up production of alternative packaging (Katrina Cornish (HCS)); key factors that play a role in life cycle analysis of packaging (Ajay Shah (FABE)); economic barriers to current packaging replacement (Ajay Shah (FABE)); policy hurdles to sustainable packaging solutions (Ajay Shah (FABE)); consumer demands and expectations of sustainable packaging (Chris Simons (FST)); waste utilization (Katrina Cornish (HCS), Emmanouil Chatzakis (FST)); and end of life opportunities (Katrina Cornish (HCS), Yael Vodovotz (FST)).

Our interdisciplinary faculty team includes experts from multiple disciplines:

Faculty Member, Department	Relevant Area of Expertise
Dr. Yael Vodovotz, FST	Material properties of biopolymers and bioplastics
Dr. David Nagib, Chemistry and Biochemistry	Organic chemistry applications for streamlined synthesis of improved medicines, materials, and biofuels

Dr. Katrina Cornish, HCS	Domestic natural rubber production and sustainability; Alternative uses for waste materials
Dr. Ajay Shah, FABE	Improving the efficiency, economics and emissions of plant-based food, material, and energy production systems; life and economic cycles assessments
Dr. Chris Simons, FST	Neural and physiological underpinnings of sensation, reward, and consumer decision
Dr. Emmanouil Chatzakis, FST	Utilization of coffee waste for alternative uses such as plasticizers, adhesives, coatings and biopolymers.

General Education Expected Learning Outcomes

As part of the Sustainability category of the General Education curriculum, this course is designed to prepare students to be able to do the following:

- **Goal 1: Successful students will analyze sustainability at a more advanced and in-depth level than in the Foundations component.**
 - 1.1 Engage in critical and logical thinking about the topic or idea of sustainability.
 - 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of sustainability.
- **Goal 2: Successful students will integrate approaches to sustainability by making connections to out-of- classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.**
 - 2.1 Identify, describe and synthesize approaches or experiences as they apply to sustainability.
 - 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment and creative work, building on prior experiences to respond to new and challenging contexts.
- **Goal 3: Successful students will analyze and explain how social and natural systems function, interact and evolve over time; how human well-being depends on these interactions; how actions have impacts on subsequent generations and societies globally; and how human values, behaviors and institutions impact multifaceted potential solutions across time.**
 - 3.1 Describe elements of the fundamental dependence of humans on Earth and environmental systems, and on the resilience of these systems.
 - 3.2 Describe, analyze and critique the roles and impacts of human activity and technology on both human society and the natural world, in the past, present and future.



- 3.3 Devise informed and meaningful responses to problems and arguments in the area of sustainability based on the interpretation of appropriate evidence and an explicit statement of values.

This course fulfills the General Education learning objectives for the Sustainability Theme by:

- Engaging in critical and logical thinking about sustainability by exposing students to the global issue of how to dispose of plastic packaging.
- Engaging in a scholarly exploration by examining sustainability through multiple dimensions, including material science, policy, human factors, economics, and life cycle assessments.
- Identify, describe, and synthesize approaches or experiences by utilizing problem solving techniques through a team approach to propose a sustainable solution to a current packaging issue.
- Describing, analyzing, critiquing, and assessing the impact of the plastics problem by exploring the human impact on the environment and economic implications.
- Devising informed and meaningful potential solutions by assessing all aspects of a successful alternative packaging, thus learning to approach these problems from various disciplines.

Learning Outcomes

By the end of this course, students should successfully be able to:

- Engage in critical and logical thinking about the complexity and shortcomings of sustainability in the current packaging industry, as well as sustainable packaging alternatives.
- In a team setting, propose new sustainable options for packaging to substitute into the current industry line while meeting producer and consumer expectations.
- Identify, describe, and synthesize key challenges and hurdles to introducing sustainable materials from renewable sources into the packaging system, as well as key challenges of end-of-life materials.
- Justify packaging testing and analysis to achieve desired final properties.
- Determine biopolymer characteristics and describe the capabilities needed to meet the demands of specific packaging goals.



How This Course Works

Mode of delivery: This course is 100% in-person.

Credit hours and work expectations: This is a 4 credit-hour course. According to [Ohio State bylaws on instruction](https://www.osu.edu/credithours) (go.osu.edu/credithours), students should expect around 4 hours per week of time spent on direct instruction in addition to 8 hours of homework (reading and assignment preparation, for example) to receive a grade of C average.

Attendance and participation requirements: Research shows regular participation is one of the highest predictors of success. With that in mind, I have the following expectations for everyone's participation:

- **Participating in class activities for attendance: Attend all lectures and be prepared for in class discussion.** If an emergency (illness, death in the family, job interview, etc.) prevents you from attending class, please contact Dr. Vodovotz as soon as possible via email.
- **Office hours: optional**
Questions and concerns should be brought to office hours. If the office hours times don't work, appointments may be requested by email.



Course Materials, Fees and Technologies

Required Materials

- Guillard, V., Gaucel, S., Fornaciari, C., Angellier-Coussy, H., Buche, P., Gontard, N. (2018). The Next Generation of Sustainable Food Packaging to Preserve Our Environment in a Circular Economy Context. *Frontiers in Nutrition* (5), 10.3389/fnut.2018.00121.
- Jedlicka, W. (2009). *Packaging Sustainability: Tools, Systems and Strategies for Innovative Package Design*. John Wiley & Sons.
- Reichert, C. L., Bugnicourt, E., Coltelli, M.-B., Cinelli, P., Lazzeri, A., Canesi, I., Braca, F., Martínez, B. M., Alonso, R., Agostinis, L., Verstichel, S., Six, L., Mets, S. D., Gómez, E. C., Ißbrücker, C., Geerinck, R., Nettleton, D. F., Campos, I., Sauter, E., ... Schmid, M. (2020). Bio-based packaging: Materials, modifications, industrial applications and Sustainability. *Polymers*, 12(7), 1558. <https://doi.org/10.3390/polym12071558>
- Rosenboom, JG., Langer, R. & Traverso, G. (2022). Bioplastics for a circular economy. *Nat Rev Mater* 7, 117–137, <https://doi.org/10.1038/s41578-021-00407-8>
- Van Roijen, E. C., Miller, S. A. (2022). A review of bioplastics at end-of-life: Linking experimental biodegradation studies and life cycle impact assessments, *Resources, Conservation and Recycling*, (181), 106236, <https://doi.org/10.1016/j.resconrec.2022.106236>.
- Class lectures will be posted on CarmenCanvas

Fees and/or Additional Requirements

- None

Required Equipment

- **Computer:** current Mac (MacOS) or PC (Windows 10) with high-speed internet connection to access CarmenCanvas
- **Other:** a mobile device (smartphone or tablet) to use for BuckeyePass authentication

If you do not have access to the technology you need to succeed in this class, review options for [technology and internet access](https://go.osu.edu/student-tech-access) (go.osu.edu/student-tech-access).

Required Software

Microsoft Office 365: All Ohio State students are now eligible for free Microsoft Office 365. Visit the [installing Office 365](https://go.osu.edu/office365help) (go.osu.edu/office365help) help article for full instructions.

CarmenCanvas Access

You will need to use [BuckeyePass](https://buckeyepass.osu.edu) (buckeyepass.osu.edu) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you do each of the following:

- Register multiple devices in case something happens to your primary device. Visit the [BuckeyePass - Adding a Device](https://go.osu.edu/add-device) (go.osu.edu/add-device) help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes, good for 365 days, that can each be used once.
- [Install the Duo Mobile application](https://go.osu.edu/install-duo) (go.osu.edu/install-duo) on all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at [614-688-4357 \(HELP\)](tel:614-688-4357) and IT support staff will work out a solution with you.

Technology Skills Needed for This Course

- Basic computer and web-browsing skills
- [Navigating CarmenCanvas](https://go.osu.edu/canvasstudent) (go.osu.edu/canvasstudent)

Technology Support

For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, seven days a week.

- **Self Service and Chat:** go.osu.edu/it
- **Phone:** [614-688-4357 \(HELP\)](tel:614-688-4357)
- **Email:** servicedesk@osu.edu

Grading and Faculty Response

How Your Grade is Calculated

Assignment Category	Points
Weekly Reflections (10)	120 (12 points each)
Team Participation	50
Oral Presentation	30
Final Paper	400
Total	600

See [Course Schedule](#) for due dates.

Descriptions of Major Course Assignments

Weekly Reflections

Description: Weekly one-page written reflection describing how the content taught in class that week will be integrated into the team project. Each team member must submit their own assessment. The following will need to be included in each written assignment:

- Title of team
- Brief description of integration of lecture content into team project
- Expected outcomes
- Potential pitfalls

Student teams will receive faculty feedback on their reflections each week. This feedback should be incorporated into the final paper. The table below details the weekly topics to be addressed in the Weekly Reflections:

Weekly Reflection Topic	Points	GE ELOs addressed
Introduction to plastics and packaging and the effects of their disposal on sustainability	10	1.1, 1.2, 2.1, 3.1

Introduction to plastics and packaging and sustainable alternatives	10	1.2, 2.1, 3.2
Challenges in producing sustainable materials with equivalent properties to those of petroleum based plastics	10	1.2, 2.1, 3.2
Factors influencing scale up production of alternative packaging	10	1.2, 2.1, 3.2
Key factors that play a role in life cycle analysis of packaging	10	1.2, 2.1, 3.2
Economic barriers to current packaging replacement	10	1.1, 3.1
Consumer demands and expectations of sustainable packaging	10	1.1, 3.2
Waste utilization for improved sustainability	10	1.1, 3.2
End of life opportunities for improved sustainability	10	1.1, 3.2
Industry speakers	10	3.2

Academic integrity and collaboration: Your written assignments must be your own original work. You are encouraged to ask a trusted person to proofread your assignments before you turn them in but no one else should revise or rewrite your work.

Team Participation

Each student is expected to contribute to the team project from initial ideation and throughout the semester. When the teams are established, students will discuss and define each member's meaningful contribution to the team. Each team will develop a team charter that will be turned in and assessed for 10 participation points. The team captain will assess participation from each team member (40 points) and the team members will rate the team captain as far as participation (40 points).

Academic integrity and collaboration: You must attend class and participate as outlined in your team charter to receive these points.

Oral Presentation

Prior to the presentation, the class will discuss what makes a successful/meaningful presentation. Based on this discussion, the class will develop a rubric for assessing the oral presentations. Each student will assess each team's presentation based on this rubric. The instructor will compile the student assessment and will include this input in the final grade

given by the instructor. Universal design is built into Oral Presentation as well. Students have the opportunity to choose how they would like to present their project. The presentation does not have to be a traditional lecture and slideshow presentation. Students can utilize other methods, such as making a video, flyer, infographic, or digital media to use in the presentation. If a team has another idea, please discuss with the lead instructor.

Each team will present their project. All members of the team will be presenting as outlined in the team charter. The details of the content of the presentation will be discussed in class and posted in CarmenCanvas.

Academic integrity and collaboration: You must participate in the presentation as outlined in your team charter to receive these points.

Final Paper

Description: The final paper will be structured as a proposal and will include all aspects of the team solution for a specific packaging sustainable alternative. Each team will submit one project paper (up to 15 pages). The final paper will require students to integrate the approaches to sustainability presented in the class. Students will analyze sustainability of their packaging alternative from multiple perspectives and will devise an informed and meaningful response to sustainability problems in the form of their sustainable packaging alternative.

Midway in the semester, each team will submit a draft of the final paper for instructor review. The instructors will review the paper using the rubric below and offer suggestions and comments. Each team will have an opportunity to reflect on the feedback and revise the paper after the instructor review. Details of what to include in the paper and its structure will be handed out in class and posted on CarmenCanvas.

Assessment category	Percentage
Introduction of product to be replaced	10
Alternative packaging proposed	15
Key factors considered	40
Possible challenges, limitations	10
Waste utilization/end-of-life opportunities	10
Clarity of proposal	10
Format, references	5
Total	100

Academic integrity and collaboration: Your final paper must be your team's own original work. Students are encouraged to use peer-reviewed sources in justifying and explaining their proposed solutions. References must be clearly indicated in the text and a reference list must be included at end of the paper. Follow **APA** style for citations and the reference list. The team is encouraged to ask a trusted person to proofread the final paper before turning it in, but no one else should revise or rewrite your work. Students can also utilize the OSU Writing Center as a resource for feedback (see: <https://cstw.osu.edu/our-programs/writing-center>).

Late Assignments

Please refer to Carmen for due dates. Due dates are set to help you stay on pace and to allow timely feedback that will help you complete subsequent assignments. In case of emergencies and other circumstances that prevent you from turning in an assignment on time, please contact Dr. Vodovotz as soon as possible by email. Official documentation (e.g., from a doctor's office or hospital or interviewer) must be provided. Accommodations will be made at Dr. Vodovotz's discretion.

Instructor Feedback and Response Time

Please see below how to contact me for questions/concerns related to this course:.

- **Preferred contact method:** If you have a question, please contact me at vodovotz.1@osu.edu. I will reply to emails within **24 hours on days when class is in session at the university**.
- **Class announcements:** I will send all important class-wide messages through the Announcements tool in CarmenCanvas. Please check [your notification preferences](https://go.osu.edu/canvas-notifications) (go.osu.edu/canvas-notifications) to ensure you receive these messages.
- **Discussion board:** I will check and reply to messages in the discussion boards once mid-week and once at the end of the week.
- **Grading and feedback:** For assignments submitted before the due date, I will try to provide feedback and grades within **seven days**. Assignments submitted after the due date may have reduced feedback and grades may take longer to be posted.

Grading Scale

93–100: A	73–76.9: C
90–92.9: A-	70–72.9: C-
87–89.9: B+	67–69.9: D+
83–86.9: B	60–66.9: D
80–82.9: B-	Below 60: E
77–79.9: C+	



Other Course Policies

Discussion and Communication Guidelines

I expect significant debate and discussions during our class periods but please remember to be respectful and thoughtful.

Team Communication: It is imperative that clear and timely communication take place between team members to assure the project progresses throughout the semester. Each team member is expected to fully participate in ideation through selection and characterization of the sustainable packaging alternative. A team captain will be selected who will assure proper progress is made but allow all team members equal participation. The Team captain will be responsible for final upload of project and assuring all team members have engaged in this assignment by assuring open communication.

Academic Integrity Policy

See [Descriptions of Major Course Assignments](#) for specific guidelines about collaboration and academic integrity in the context of this online class.

Ohio State's Academic Integrity Policy

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the university's [Code of Student Conduct](#) (studentconduct.osu.edu), and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the university's *Code of Student Conduct* and this syllabus may constitute "Academic Misconduct."

The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the university or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the university's *Code of Student Conduct* is never considered an excuse for academic misconduct, so I recommend that you review the *Code of Student Conduct* and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by university rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the university's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the university.



If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- [Committee on Academic Misconduct](http://go.osu.edu/coam) (go.osu.edu/coam)
- [Ten Suggestions for Preserving Academic Integrity](http://go.osu.edu/ten-suggestions) (go.osu.edu/ten-suggestions)
- [Eight Cardinal Rules of Academic Integrity](http://go.osu.edu/cardinal-rules) (go.osu.edu/cardinal-rules)

Copyright for Instructional Materials

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

1. Online reporting form at equity.osu.edu,
2. Call 614-247-5838 or TTY 614-688-8605,
3. Or Email equity@osu.edu

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member."

This course adheres to The Principles of Community adopted by the College of Food, Agricultural, and Environmental Sciences. These principles are located on the Carmen site for this course; and can also be found at <https://go.osu.edu/principlesofcommunity>. For additional information on Diversity, Equity, and Inclusion in CFAES, contact the CFAES Office for Diversity, Equity, and Inclusion (<https://equityandinclusion.cfaes.ohio-state.edu/>). If you have been a victim of or a witness to a bias incident, you can report it online and anonymously (if you choose) at <https://studentlife.osu.edu/bias/report-a-bias-incident.aspx>.

Your Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing.

If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th floor of the Younkin Success Center and 10th floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available through the 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

For students in the College of Food, Agricultural, and Environmental Sciences, David Wirt, wirt.9@osu.edu, is the CFAES embedded mental health counselor on the Columbus campus. To contact David, please call 614-292-5766. Students should mention their affiliation with CFAES if interested in speaking directly with David.

Accessibility Accommodations for Students with Disabilities

Requesting Accommodations

The university strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability including mental health, chronic or temporary medical conditions, please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with [Student Life Disability Services \(SLDS\)](#). After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's [request process](#), managed by Student Life Disability Services.

Disability Services Contact Information

- Phone: [614-292-3307](tel:614-292-3307)
- Website: slds.osu.edu
- Email: slds@osu.edu
- In person: [Baker Hall 098, 113 W. 12th Avenue](#)



Course Schedule

Refer to the CarmenCanvas course for up-to-date due dates.

Week	Topics, Readings, Assignments, Due Dates	GE ELOs
1	<p>Explanation of course/Introduction to plastics and packaging and the effects of their disposal on sustainability</p> <p>Readings: Bioplastics for a circular economy; assigned reading from Packaging Sustainability TBD</p> <p>Assignments: Weekly Reflection, Team Charter</p>	1.1, 2.1
2	<p>Introduction to plastics and packaging and sustainable alternatives/Team selection</p> <p>Readings: Bio-Based Packaging: Materials, Modifications, Industrial Applications and Sustainability; assigned reading from Packaging Sustainability TBD</p> <p>Assignments: Weekly Reflection</p>	1.1, 2.1
3	<p>Challenges in producing sustainable materials with equivalent properties to those of petroleum based plastics</p> <p>Readings: assigned reading from Packaging Sustainability TBD</p> <p>Assignments: Weekly Reflection</p>	1.1, 1.2, 2.1, 3.1
4	<p>Factors influencing scale up production of alternative packaging</p> <p>Readings: assigned reading from Packaging Sustainability TBD</p> <p>Assignments: Weekly Reflection</p>	1.2, 2.1, 3.2
5	<p>Key factors that play a role in life cycle analysis of packaging</p>	1.2, 2.1, 3.2



Week	Topics, Readings, Assignments, Due Dates	GE ELOs
	<p>Readings: A review of bioplastics at end-of-life: Linking experimental biodegradation studies and life cycle impact assessments; assigned reading from Packaging Sustainability TBD</p> <p>Assignments: Weekly Reflection</p>	
6	<p>Economic barriers to current packaging replacement</p> <p>Readings: assigned reading from Packaging Sustainability TBD</p> <p>Assignments: Weekly Reflection</p>	1.2, 2.1, 3.2
7	<p>Consumer demands and expectations of sustainable packaging</p> <p>Readings: assigned reading from Packaging Sustainability TBD</p> <p>Assignments: Weekly Reflection</p>	1.1, 3.1
8	<p>Waste utilization for improved sustainability</p> <p>Readings: The Next Generation of Sustainable Food Packaging to Preserve Our Environment in a Circular Economy Context; assigned reading from Packaging Sustainability TBD</p> <p>Assignments: Weekly Reflection</p>	1.1, 3.2
9	<p>End of life opportunities for improved sustainability</p> <p>Readings: Bioplastics for a circular economy; assigned reading from Packaging Sustainability TBD</p> <p>Assignments: Weekly Reflection</p>	1.1, 3.2

Week	Topics, Readings, Assignments, Due Dates	GE ELOs
10	Industry speakers Readings: assigned reading from Packaging Sustainability TBD Assignments: Weekly Reflection	2.1, 3.2
11	Team project and preparing paper and presentation	1.2, 2.1, 2.2, 3.2, 3.3
12	Individual work sessions with team	1.2, 2.1, 2.2, 3.2, 3.3
13	Team presentations Assignments: Oral Presentation	1.2, 2.1, 2.2, 3.2, 3.3
14	Team presentations Assignments: Oral Presentation; Final Paper	1.2, 2.1, 2.2, 3.2, 3.3



GE THEME COURSES

Overview

Courses that are accepted into the General Education (GE) Themes must meet two sets of Expected Learning Outcomes (ELOs): those common for all GE Themes and one set specific to the content of the Theme. This form begins with the criteria common to all themes and has expandable sections relating to each specific theme.

A course may be accepted into more than one Theme if the ELOs for each theme are met. Courses seeing approval for multiple Themes will complete a submission document for each theme. Courses seeking approval as a 4-credit, Integrative Practices course need to complete a similar submission form for the chosen practice. It may be helpful to consult your Director of Undergraduate Studies or appropriate support staff person as you develop and submit your course.

Please enter text in the boxes to describe how your class will meet the ELOs of the Theme to which it applies. Please use language that is clear and concise and that colleagues outside of your discipline will be able to follow. You are encouraged to refer specifically to the syllabus submitted for the course, since the reviewers will also have that document. Because this document will be used in the course review and approval process, you should be as specific as possible, listing concrete activities, specific theories, names of scholars, titles of textbooks etc.

Course subject & number

General Expectations of All Themes

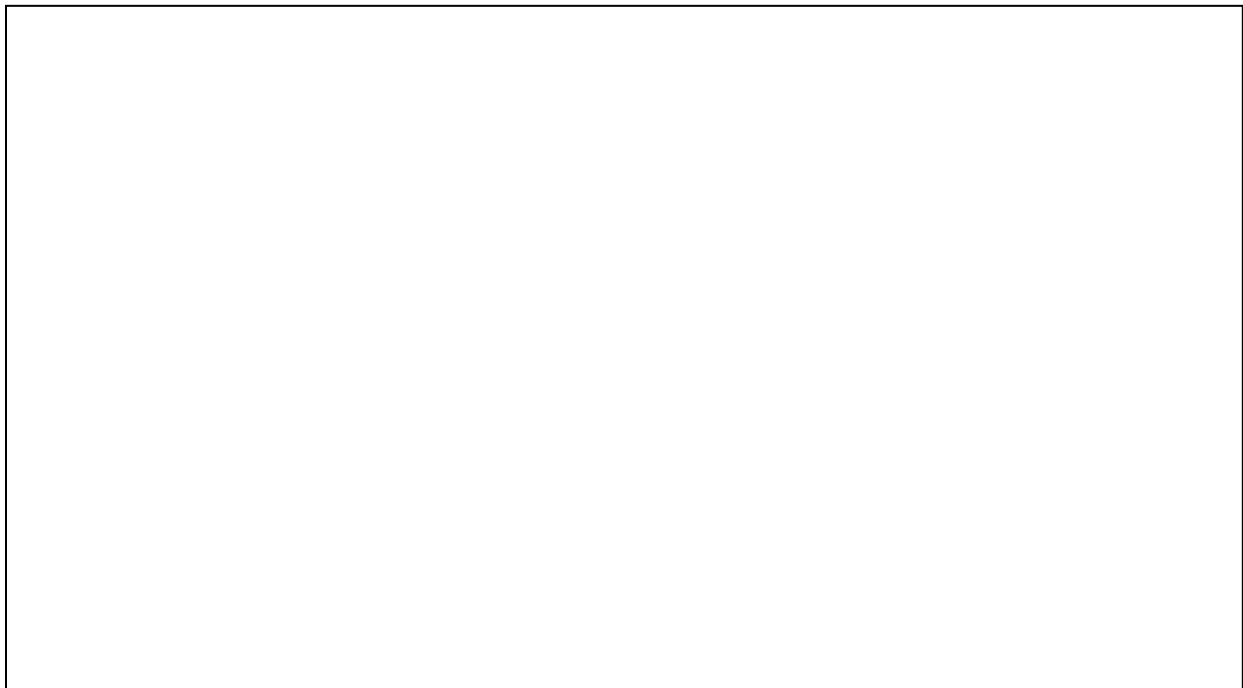
GOAL 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations.

Please briefly identify the ways in which this course represents an advanced study of the focal theme. In this context, “advanced” refers to courses that are e.g., synthetic, rely on research or cutting-edge findings, or deeply engage with the subject matter, among other possibilities. *(50-500 words)*

Course subject & number

ELO 1.1 Engage in critical and logical thinking about the topic or idea of the theme. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

ELO 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or idea of the theme. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

A large, empty rectangular box with a thin black border, intended for the student to write their response to the ELOs. It occupies the lower half of the page.

Course subject & number

GOAL 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

ELO 2.1 Identify, describe, and synthesize approaches or experiences as they apply to the theme.

Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

ELO 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.

Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

Course subject & number

Specific Expectations of Courses in Sustainability

GOAL 1: Students analyze and explain how social and natural systems function, interact, and evolve over time; how human wellbeing depends on these interactions; how actions have impacts on subsequent generations and societies globally; and how human values, behaviors, and institutions impact multi-faceted, potential solutions across time.

1.1 Describe elements of the fundamental dependence of humans on Earth and environmental systems and on the resilience of these systems. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

Course subject & number

1.2 Describe, analyze and critique the roles and impacts of human activity and technology on both human society and the natural world, in the past, currently, and in the future. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

1.3 Devise informed and meaningful responses to problems and arguments in the area of sustainability based on the interpretation of appropriate evidence and an explicit statement of values. Please link this ELO to the course goals and topics and indicate *specific* activities/assignments through which it will be met. (50-700 words)

July 15, 2022

To whom it may concern:

For the course FDSCTE 3110 Alternative Packaging for a Greener Planet, we sought concurrence from the following colleges and departments:

- College of Arts and Sciences
- Fisher College of Business, College of Engineering
- College of Public Health
- SENR within CFAES

All concurrences received were in support of the course. The concurrences received are attached to this course proposal. No response was received from Fisher College of Business, Dr. Andrea Prud'homme, so concurrence is assumed. The College of Public Health, Dr. Michael Bisesi responded that concurrence was not needed since there is not alignment with their disciplines.

Thank you,

Department of Food Science and Technology

Ohio State Department Course Review Concurrence Form

The purpose of this form is to provide a simple system of obtaining departmental reactions to proposed new courses, group studies, study tours, workshop requests, and course changes. A letter may be substituted for this form.

Academic units initiating a request which requires such a reaction should complete Section A of this form and send a copy of the form, course request, and syllabus to each of the academic units that might have related interests in the course. Initiating units should allow at least two weeks for responses.

Academic units receiving this form should respond to Section B and return the form to the initiating unit. Overlap of course content and other problems should be resolved by the academic units before forwarding this form and all other accompanying documentation to the Office of Academic Affairs.

A. Information from academic unit *initiating* the request:

Initiating Academic Unit: CFAES Food Science & Technology Date: 6/21/2022

Registrar's Listing: FDSCTE 3110

Course Number: 3110 Level: U P G Credit Hours: 4

Course Title: Alternative Packaging for a Greener Planet

Type of Request: New Course Group Studies Workshop Study Tour Course Change

Academic Unit with related interests asked to review the request (use a separate form for each unit while requesting concurrences from multiple units): College of Engineering

Date responses are needed: 7/7/2022

B. Information from academic units *reviewing* the request:

- The academic unit **supports** the proposal
 The academic unit **does not support** the proposal.
Please explain:

The academic unit suggests:

John J. Lenhart - Associate Chair and Chair Undergraduate Studies

Signature of Department Chair

Signature of Graduate Studies Chair (if applicable)

Ohio State Department Course Review Concurrence Form

The purpose of this form is to provide a simple system of obtaining departmental reactions to proposed new courses, group studies, study tours, workshop requests, and course changes. A letter may be substituted for this form.

Academic units initiating a request which requires such a reaction should complete Section A of this form and send a copy of the form, course request, and syllabus to each of the academic units that might have related interests in the course. Initiating units should allow at least two weeks for responses.

Academic units receiving this form should respond to Section B and return the form to the initiating unit. Overlap of course content and other problems should be resolved by the academic units before forwarding this form and all other accompanying documentation to the Office of Academic Affairs.

A. Information from academic unit *initiating* the request:

Initiating Academic Unit: CFAES Food Science & Technology Date: 6/21/2022

Registrar's Listing: FDSCTE 3110

Course Number: 3110 Level: U P G Credit Hours: 4

Course Title: Alternative Packaging for a Greener Planet

Type of Request: New Course Group Studies Workshop Study Tour Course Change

Academic Unit with related interests asked to review the request (use a separate form for each unit while requesting concurrences from multiple units): SENR

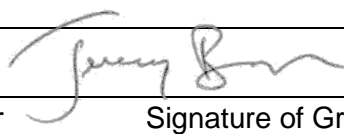
Date responses are needed: 7/7/2022

B. Information from academic units *reviewing* the request:

- The academic unit **supports** the proposal
 The academic unit **does not support** the proposal.
Please explain:

- The academic unit suggests:

Signature of Department Chair

 Academic Affairs Committee Chair
Signature of Graduate Studies Chair (if applicable)

From: [Osborne, Jeanne](#)
To: [Davis, Molly J.](#)
Subject: FW: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet
Date: Thursday, June 23, 2022 7:33:27 AM
Attachments: [image002.png](#)
[image003.png](#)

Dear Molly,

FYI.

Jeanne

From: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>
Sent: Thursday, June 23, 2022 7:33 AM
To: Osborne, Jeanne <osborne.2@osu.edu>
Subject: Fwd: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

Fyi

Get [Outlook for Android](#)

From: Fox, Robert <fox.2@osu.edu>
Sent: Thursday, June 23, 2022 7:13:45 AM
To: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>
Subject: RE: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

I support this proposal.

-Rob Fox

Robert A Fox
Professor and Chair, Speech and Hearing Science
Courtesy Professor, Linguistics
Courtesy Professor, Otolaryngology
Fellow, Acoustical Society of America
Fellow, American Speech-Language-Hearing Association
The Ohio State University

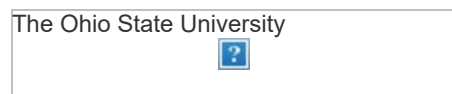
From: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>
Sent: Wednesday, June 22, 2022 4:19 PM
To: _ASC NMS Chairs Directors <ASC-nms-chairs-directors@osu.edu>; _ASC NMS UG Directors <ASC-NMS-UG-Directors@osu.edu>; _ASC SBS-Chairs <ASC-SBS-Chairs@osu.edu>; _ASC SBS UG Directors <ASC-SBS-UG-Directors@osu.edu>
Cc: Osborne, Jeanne <osborne.2@osu.edu>
Subject: FW: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

Dear all,

Please find attached a proposal for new course Food Science and Technology 3110 “Alternative Packaging for a Greener Planet” in CFAES. The course will apply for the new GE Theme: Sustainability. Since this course deals with the environment, per OAA policy it is requesting concurrences from many academic units at the university. Please email your responses/concurrences to Jeanne Osborne (osborne.2@osu.edu), Assistant Dean in CFAES, and cc me. *Responses are due by **Thursday, July 7, 2022***. Concurrence will be assumed if no response is received within two weeks.

Please let me know if you have any questions.

Many thanks,
Bernadette



Bernadette Vankeerbergen, Ph.D.
Assistant Dean, Curriculum
College of Arts and Sciences
306B Dulles Hall, 230 Annie & John Glenn Ave.
Columbus, OH 43210
Phone: 614-688-5679
<http://ascas.osu.edu>

From: Osborne, Jeanne <osborne.2@osu.edu>
Sent: Tuesday, June 21, 2022 4:12 PM
To: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>
Cc: Davis, Molly J. <davis.2020@osu.edu>; Rodriguez-Saona, Luis <rodriguez-saona.1@osu.edu>
Subject: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

Dear Bernadette,

Good afternoon!

Attached please find the syllabus and concurrence request from the Department of Food Science and Technology in CFAES for a new course for the GE Sustainability Theme, FDSCTE 3110 – Alternative Packaging for a Greener Planet. With the topic area of Sustainability, concurrence is required from your college. Would you please forward the attached concurrence form and syllabus to the appropriate units within your college? We would appreciate feedback by Thursday, July 7, 2022, allowing extra time for the July 4 holiday.

Please let me know if you have any questions or need additional information.

Take care, and have a great rest of your week!

Jeanne



Jeanne M. Osborne | Pronouns: She, Her, Hers

Assistant Dean for Academic Affairs

College of Food, Agricultural, and Environmental Sciences

100E Agricultural Administration, 2120 Fyffe Rd.

Columbus, OH 43210

Tel: 614-292-1734

Fax: 614-292-1218

e-mail: Osborne.2@osu.edu

'Unexpected kindness is the most powerful, least costly, and most underrated agent of human change' (Bob Kerrey)

Check out KINDNESS AT OHIO STATE at <http://kind.osu.edu>!

From: [Osborne, Jeanne](#)
To: [Davis, Molly J.](#)
Subject: FW: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet
Date: Tuesday, July 5, 2022 10:34:35 AM
Attachments: [image001.png](#)

Molly,

Here you go.

Take care,

Jeanne

From: Quinzon-Bonello, Rosario <quinzon-bonello.1@osu.edu>
Sent: Tuesday, July 5, 2022 10:32 AM
To: Osborne, Jeanne <osborne.2@osu.edu>
Subject: FW: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

CBE Concurrence.

From: Tomasko, David <tomasko.1@osu.edu>
Sent: Tuesday, July 5, 2022 10:24 AM
To: Quinzon-Bonello, Rosario <quinzon-bonello.1@osu.edu>
Subject: Re: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

CBE will concur.

David L. Tomasko
Associate Dean for Academic Programs & Student Services
Professor of Chemical & Biomolecular Engineering
The Ohio State University
If you have a zoom meeting scheduled with me: <https://osu.zoom.us/my/davidtomasko>

Executive Assistant: Winnie Sampson
sampson.38@osu.edu
614-688-4602

If one accepts that without deeply understanding and being a part of society then one cannot develop meaningful solutions to the problems it presents, then current demographic trends in engineering are an actual threat to the profession.

From: Quinzon-Bonello, Rosario <quinzon-bonello.1@osu.edu>
Sent: Tuesday, July 5, 2022 9:52 AM
To: Tomasko, David <tomasko.1@osu.edu>
Subject: FW: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

Hi Dave,

I am not confident that Jeff will reply, so can you tell me if this course would need concurrence from CBE?

I have already received concurrence from FABE and Environmental.

Thanks,

Rosie

From: Quinzon-Bonello, Rosario
Sent: Wednesday, June 29, 2022 1:08 PM
To: Sumption, Michael <sumption.3@osu.edu>; Chalmers, Jeffrey <chalmers.1@osu.edu>; Winston, Ryan J. <winston.201@osu.edu>; Lenhart, John <lenhart.49@osu.edu>
Subject: FW: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

Hello gentlemen,

Food Science is seeking concurrence for the attached proposed course "Alternative Packaging for a Greener Planet" for the Sustainability Theme.

I am not quite sure whom to send this, but if you feel that your program should be involved in providing concurrence (or not), please let me know.

If yes, please complete the attached Concurrence Form and return to me before July 7th, which is the deadline CFAES provided.

If you think there is another engineering program I should approach, please let me know, as well.

Thanks!

Rosie

From: Osborne, Jeanne <osborne.2@osu.edu>
Sent: Tuesday, June 21, 2022 4:16 PM
To: Quinzon-Bonello, Rosario <quinzon-bonello.1@osu.edu>; Tomasko, David <tomasko.1@osu.edu>
Cc: Davis, Molly J. <davis.2020@osu.edu>; Rodriguez-Saona, Luis <rodriguez-saona.1@osu.edu>
Subject: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

Dear Rosie and Dr. Tomasko,

Good afternoon!

Attached please find the syllabus and concurrence request from the Department of Food Science and Technology in CFAES for a new course for the GE Sustainability Theme, FDSCTE 3110 – Alternative Packaging for a Greener Planet. With the topic area of Sustainability, concurrence is required from your college. Would you please forward the attached concurrence form and syllabus to the appropriate units within your college? We would appreciate feedback by Thursday, July 7,

2022, allowing extra time for the July 4 holiday.

Please let me know if you have any questions or need additional information.

Take care, and have a great rest of your week!

Jeanne



Jeanne M. Osborne | *Pronouns: She, Her, Hers*

Assistant Dean for Academic Affairs

College of Food, Agricultural, and Environmental Sciences

100E Agricultural Administration, 2120 Fyffe Rd.

Columbus, OH 43210

Tel: 614-292-1734

Fax: 614-292-1218

e-mail: Osborne.2@osu.edu

'Unexpected kindness is the most powerful, least costly, and most underrated agent of human change' (Bob Kerrey)

Check out KINDNESS AT OHIO STATE at <http://kind.osu.edu>!

From: [Osborne, Jeanne](#)
To: [Davis, Molly J.](#)
Subject: FW: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet
Date: Tuesday, July 5, 2022 8:24:26 AM
Attachments: [image001.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Molly,

Here you go!

Take care,

Jeanne

From: Quinzon-Bonello, Rosario <quinzon-bonello.1@osu.edu>
Sent: Tuesday, July 5, 2022 8:23 AM
To: Osborne, Jeanne <osborne.2@osu.edu>
Subject: FW: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

Hello Jeanne,

Below is FABE concurrence for FDSCTE 3110.

Thanks,
Rosie

From: Winston, Ryan J. <winston.201@osu.edu>
Sent: Tuesday, July 5, 2022 7:40 AM
To: Quinzon-Bonello, Rosario <quinzon-bonello.1@osu.edu>
Subject: Fw: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

Hi Rosie,

Hope you're having an enjoyable summer. I think you'd mentioned that you were headed to Italy. Maybe you're there now?!

Anyhow, I've received feedback from the faculty in FABE on this course concurrence request. Since there are two FABE faculty involved in the course instruction, there was general agreement that there was no need for concurrence from our department. That said, two faculty, including our department head, suggested that the course be cross-listed in FABE given the substantial engagement from FABE faculty.

Thank you,

Ryan

Ryan Winston, PhD, PE
Assistant Professor
Department of Food, Agricultural, and Biological Engineering
Department of Civil, Environmental, and Geodetic Engineering
Core Faculty, Sustainability Institute
Ohio State University
winston.201@osu.edu
(614) 292-9354

Associate Editor
Journal of Sustainable Water in the Built Environment
<http://ascelibrary.org/journal/jswbay>

From: Shearer, Scott A. <shearer.95@osu.edu>
Sent: Thursday, June 30, 2022 10:59 AM
To: Kaletunc, Gonul <kaletunc.1@osu.edu>; Winston, Ryan J. <winston.201@osu.edu>; Chen, Qian <chen.1399@osu.edu>; Khanal, Sami <khanal.3@osu.edu>
Subject: RE: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

I agree, would be great to cross-list if FABE is providing part of the instruction. Might also boost course numbers.

Regards,
Scott



Scott A. Shearer, PhD, PE | Professor and Chair
Food, Agricultural and Biological Engineering | 200A Agricultural Engineering Building
590 Woody Hayes Drive | Columbus, OH 43210-1058
Office: 614.292.7284 | Mobile: 859.509.5026 | FAX: 614.292.9448
www.fabe.osu.edu | twitter.com/ScottShearer95



From: Kaletunc, Gonul <kaletunc.1@osu.edu>
Sent: Thursday, June 30, 2022 10:57 AM

To: Winston, Ryan J. <winston.201@osu.edu>; Shearer, Scott A. <shearer.95@osu.edu>; Chen, Qian <chen.1399@osu.edu>; Khanal, Sami <khanal.3@osu.edu>

Subject: FW: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

Hi Ryan:

I agree with you that because two of FABE faculty teaching in the course, we don't need to provide concurrence. With that said, however, we should ask the course be considered as cross-listed course with FABE so our students can sign up with a FABE number because two of FABE faculty are very involved in the course.

I suggest our recommendation be for this course to be cross listed with a FABE number. (FST 3110/FABE 3110). This should be more appropriate based on the involvement of FABE faculty in the course and based on the topics they will be responsible for.

I will bring Scott and also Sami (FABE rep in CFAES Academic Affairs) to this discussion. Sami should bring this topic for discussion in the CFAES committee and recommend that to be a cross-listed course. I also copy Victoria as Academic Affairs Chair.



Gönül Z. Kaletunc, Ph.D.

Professor of Food Engineering

Director, Faculty Professional Development Program

College of Engineering

Professional Development Committee Chair

Department of Food, Agricultural and Biological Engineering

[590 Woody Hayes Dr., Columbus, OH 43210](#)

614-292-0419 Office

kaletunc.1@osu.edu

<https://fpsi.osu.edu>

<https://awares.osu.edu/>

From: Winston, Ryan J. <winston.201@osu.edu>

Date: Wednesday, June 29, 2022 at 1:10 PM

To: Kaletunc, Gonul <kaletunc.1@osu.edu>

Subject: Fw: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

Hi Gonul,

I received the request for concurrence below for a class called "Alternative packaging for a greener planet." Both Katrina and Ajay are involved in the course...so I'm not sure whether FABE would need to provide concurrence? What do you think?

Thank you,

Ryan

Ryan Winston, PhD, PE
Assistant Professor
Department of Food, Agricultural, and Biological Engineering
Department of Civil, Environmental, and Geodetic Engineering
Core Faculty, Sustainability Institute
Ohio State University
winston.201@osu.edu
(614) 292-9354

Associate Editor
Journal of Sustainable Water in the Built Environment
<http://ascelibrary.org/journal/jswbay>

From: Quinzon-Bonello, Rosario <quinzon-bonello.1@osu.edu>
Sent: Wednesday, June 29, 2022 1:08 PM
To: Sumption, Michael <sumption.3@osu.edu>; Chalmers, Jeffrey <chalmers.1@osu.edu>; Winston, Ryan J. <winston.201@osu.edu>; Lenhart, John <lenhart.49@osu.edu>
Subject: FW: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

Hello gentlemen,

Food Science is seeking concurrence for the attached proposed course "Alternative Packaging for a Greener Planet" for the Sustainability Theme.

I am not quite sure whom to send this, but if you feel that your program should be involved in providing concurrence (or not), please let me know.

If yes, please complete the attached Concurrence Form and return to me before July 7th, which is the deadline CFAES provided.

If you think there is another engineering program I should approach, please let me know, as well.

Thanks!
Rosie

From: Osborne, Jeanne <osborne.2@osu.edu>
Sent: Tuesday, June 21, 2022 4:16 PM
To: Quinzon-Bonello, Rosario <quinzon-bonello.1@osu.edu>; Tomasko, David <tomasko.1@osu.edu>
Cc: Davis, Molly J. <davis.2020@osu.edu>; Rodriguez-Saona, Luis <rodriguez-saona.1@osu.edu>
Subject: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

Dear Rosie and Dr. Tomasko,

Good afternoon!

Attached please find the syllabus and concurrence request from the Department of Food Science and Technology in CFAES for a new course for the GE Sustainability Theme, FDSCTE 3110 – Alternative Packaging for a Greener Planet. With the topic area of Sustainability, concurrence is required from your college. Would you please forward the attached concurrence form and syllabus to the appropriate units within your college? We would appreciate feedback by Thursday, July 7, 2022, allowing extra time for the July 4 holiday.

Please let me know if you have any questions or need additional information.

Take care, and have a great rest of your week!

Jeanne



Jeanne M. Osborne | *Pronouns: She, Her, Hers*

Assistant Dean for Academic Affairs
College of Food, Agricultural, and Environmental Sciences
100E Agricultural Administration, 2120 Fyffe Rd.
Columbus, OH 43210
Tel: 614-292-1734
Fax: 614-292-1218
e-mail: Osborne.2@osu.edu

'Unexpected kindness is the most powerful, least costly, and most underrated agent of human change' (Bob Kerrey)

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From: [Osborne, Jeanne](#)
To: [Davis, Molly J.](#)
Subject: FW: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet
Date: Thursday, June 30, 2022 11:56:22 AM
Attachments: [image001.png](#)
[image002.png](#)
[Outlook-j5pq5lo5.png](#)

Molly,

From EEOB.

Take care,

Jeanne

From: Hamilton, Ian <hamilton.598@osu.edu>
Sent: Thursday, June 30, 2022 11:53 AM
To: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>; Osborne, Jeanne <osborne.2@osu.edu>
Subject: Re: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

Hi Jeanne,

EEOB concurs with the proposed offering of FDSCTE 3110. There is little to no overlap between the proposed course and current or planned EEOB offerings.

Best regards,

Ian



Ian Hamilton
Professor

Vice Chair of Undergraduate Studies, EEOB
[College of Arts & Sciences](#)

Department of Evolution, Ecology and Organismal Biology & Department of Mathematics
390 Aronoff Laboratory, 318 W 12th Ave, Columbus, OH 43210

hamilton.598@osu.edu

Pronouns: he/him/his

From: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>

Sent: Wednesday, June 22, 2022 4:19 PM

To: _ASC NMS Chairs Directors <ASC-nms-chairs-directors@osu.edu>; _ASC NMS UG Directors <ASC-NMS-UG-Directors@osu.edu>; _ASC SBS-Chairs <ASC-SBS-Chairs@osu.edu>; _ASC SBS UG Directors <ASC-SBS-UG-Directors@osu.edu>

Cc: Osborne, Jeanne <osborne.2@osu.edu>

Subject: FW: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

Dear all,

Please find attached a proposal for new course Food Science and Technology 3110 "Alternative Packaging for a Greener Planet" in CFAES. The course will apply for the new GE Theme: Sustainability. Since this course deals with the environment, per OAA policy it is requesting concurrences from many academic units at the university. Please email your responses/concurrences to Jeanne Osborne (osborne.2@osu.edu), Assistant Dean in CFAES, and cc me. *Responses are due by **Thursday, July 7, 2022***. Concurrence will be assumed if no response is received within two weeks.

Please let me know if you have any questions.

Many thanks,
Bernadette



Bernadette Vankeerbergen, Ph.D.

Assistant Dean, Curriculum

College of Arts and Sciences

306B Dulles Hall, 230 Annie & John Glenn Ave.

Columbus, OH 43210

Phone: 614-688-5679

<http://ascas.osu.edu>

From: Osborne, Jeanne <osborne.2@osu.edu>

Sent: Tuesday, June 21, 2022 4:12 PM

To: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>

Cc: Davis, Molly J. <davis.2020@osu.edu>; Rodriguez-Saona, Luis <rodriguez-saona.1@osu.edu>

Subject: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

Dear Bernadette,

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From: [Osborne, Jeanne](#)
To: [Davis, Molly J.](#)
Subject: FW: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet
Date: Friday, June 24, 2022 11:22:22 AM
Attachments: [image002.png](#)
[image003.png](#)

Molly,

Below is concurrence from the School of Communication in ASC.

Take care,

Jeanne

From: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>
Sent: Friday, June 24, 2022 10:18 AM
To: Osborne, Jeanne <osborne.2@osu.edu>
Subject: FW: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

fyi

The Ohio State University



Bernadette Vankeerbergen, Ph.D.
Assistant Dean, Curriculum
College of Arts and Sciences
306B Dulles Hall, 230 Annie & John Glenn Ave.
Columbus, OH 43210
Phone: 614-688-5679
<http://ascas.osu.edu>

From: Garrett, Kelly <garrett.258@osu.edu>
Sent: Friday, June 24, 2022 10:18 AM
To: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>
Subject: RE: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

The School is happy to support this proposal, FDSCTE 3110, as there is no overlap with our curriculum. /Kelly

From: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>
Sent: Wednesday, June 22, 2022 4:19 PM
To: _ASC NMS Chairs Directors <ASC-nms-chairs-directors@osu.edu>; _ASC NMS UG Directors <ASC-NMS-UG-Directors@osu.edu>; _ASC SBS-Chairs <ASC-SBS-Chairs@osu.edu>; _ASC SBS UG Directors <ASC-SBS-UG-Directors@osu.edu>
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Sent: Tuesday, June 21, 2022 4:12 PM

To: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>

Cc: Davis, Molly J. <davis.2020@osu.edu>; Rodriguez-Saona, Luis <rodriguez-saona.1@osu.edu>

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From: [Osborne, Jeanne](#)
To: [Davis, Molly J.](#)
Subject: FW: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet
Date: Monday, June 27, 2022 11:02:34 AM
Attachments: [image001.png](#)
[image002.png](#)

Molly,

For your growing pile!

Take care,

Jeanne

From: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>
Sent: Monday, June 27, 2022 9:30 AM
To: Osborne, Jeanne <osborne.2@osu.edu>
Subject: FW: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

fyi

From: Munroe, Darla <munroe.9@osu.edu>
Sent: Monday, June 27, 2022 8:51 AM
To: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>
Subject: Re: Concurrence Request for FDSCTE 3110 - Alternative Packaging for a Greener Planet

Bernadette: Geography concurs.

Thanks,
Darla

Darla K. Munroe, PhD
Professor and Chair
Faculty Advisory Board, Sustainability Institute
Editor in Chief, *Journal of Land Use Science*
Scientific Steering Committee, the Global Land Programme

The Ohio State University
College of Arts and Sciences Department of Geography
1036 Derby Hall, 154 North Oval Mall, Columbus, OH 43210
614-247-8382 Office
munroe.9@osu.edu osu.edu
Pronouns: she, her, hers

From: Vankeerbergen, Bernadette <vankeerbergen.1@osu.edu>

Date: Wednesday, June 22, 2022 at 4:19 PM

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