Intellectual Community Planning Grant

Food, Climate and Sustainability
Presentation Roadmap

1. The recent history of food classes at Duke
2. Recommendations from food sustainability professionals
3. My reflection & ideas
PART 1

Recent History of Food Classes at Duke

Why: To help contextualize and inform the design of the future food-climate course
Guiding Questions:

1. What food courses have been offered at Duke in the last five years?
2. What are the student interest levels?
3. How have the food course offerings changed over time?
4. What are the gaps?
Methods

Data Collection
Source: DukeHub
Data collected: Class name, Subject, Level, Class space, Class vacancy, Class description
Inclusion criteria: Fall 2019-Spring 2024, contains “food” in its course description/title
Exclusion criteria: Summer & Winter semesters

Data Analysis
Software: R, Google Sheets, Voyant Tools
A Snapshot: Food Classes @Duke in Numbers

Classes with “food” in their course description

<table>
<thead>
<tr>
<th>Undergrad Classes</th>
<th>66</th>
</tr>
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</table>

Spanning many subjects

<table>
<thead>
<tr>
<th>Grad-level classes</th>
<th>45</th>
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For reference, there are 212 subjects at Duke.
## Food Classes are Offered at Almost All Duke Schools

<table>
<thead>
<tr>
<th>School of Business</th>
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<tbody>
<tr>
<td>School of Law</td>
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<tr>
<td>Graduate School</td>
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<tr>
<td>Pratt School of Engineering</td>
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<tr>
<td>School of Medicine</td>
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</table>

- Nicholas School of the Environment
- Trinity College of Arts & Sciences
- Sanford School of Public Policy
- Divinity School

### LEGEND
- ✨ Full-sem courses
- 5 or more classes
- 🧠 Only 1 IND study or project
- ❌ No courses

**School of Nursing**

No courses
Food Classes @ Duke Span Diverse Subjects
23 Subjects have had two or more food courses

Duke's Food Courses: Distribution of Subjects

Key subjects: Environmental Sciences, Cultural Anthropology, Biology, International Comparative Studies, Public Policy, Parish, History

*Note: Many classes have <1 subject*
Recurring Themes: Course Descriptions

- Food
- Course
- Cultural
- Global
- History
- Students
- Environmental
- Policy
- Writing
- Marine
- Change
- Water
- Sustainable
- Climate
- Justice
- Develop
- Politics
- Social
- Including
- People
- Work
- Ocean
- Pollution
- Health
- Include
- Historical
- Modern
- Modern
- Challenges
- Exploring
- Economic
- Work
- Policy
- Travel
- People
- Pollution
- Ocean
- Health
- Include
- Historical
- Modern
- Challenges
- Exploring
- Economic
These 10 courses cover both food & climate

**Ecology**
- BIOLOGY/GLHLTH/ENVIRON (100) - Climate, Coffee, and Coronavirus: Why Ecology Matters to Human Health
- BIOLOGY (100) - Where Did Food Come From? The Ecology of Farming
- BIOLOGY (200) - The Ecology of Human Health
- ENVIRON/ETHICS/POLSCI (200) - Ecology and the Human Good: Sustainability, Community, Nature, and Belonging

**Others**
- ENVIRON 500 - Environmental Justice: Theory and Practice for Environmental Scientists and Policy Professionals
- ENVIRON/GLHLTH (300) - Planetary Health: Ecosystems, Human Health and Policy
- ENVIRON/LAW/PUBPOL (500/700) - Risk Regulation in the United States, Europe, and Beyond
- MARSCI (200) - Marine Social Science

**Business**
- STRATEGY (600) - Climate, Sustainability and Corporate Governance
- STRATEGY (600) - Sustainable Business Strategy
2 other courses cover both food & climate

- ENVIRON 245: Theory & Practice of Sustainability
- EOS/ENVIRON/ECS 500-level: Climate & Society
  - UG counterpart: Climate Change for Future Leaders

*Not mentioned course description
Gauging Student Interest Levels: Enrollment in Food Classes @Duke

Average enrollment per semester

319

Total enrollment in the last 5 years

3152

Student Enrollment is Higher in the Fall Semesters, and increased AY23-24
The # of Food Classes Offered Per Semester Kept Steady and Rose This Academic Year

Number of Food Courses Offered Per Academic Year

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Spring</th>
<th>Fall</th>
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<tbody>
<tr>
<td>2019-20</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>2020-21</td>
<td>14</td>
<td>14</td>
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<tr>
<td>2021-22</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>2022-23</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>2023-24</td>
<td>19</td>
<td>24</td>
</tr>
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18% rise
New Food Courses Offered

House Course: Regenerating Food Systems
House Course: Food History and Science (Note: full!)

ICS/HISTORY/ENVIRON (100): Gateway Seminar: Extraction: Humans and the Underground Earth

MARSCI (200): Marine Social Science

CULANTH/RIGHTS (200): Southern Voices: Activism and Progressive Movements in the US South


KOREAN (300): Advanced Korean
Courses that were discontinued (Pt 1)

Only in 19' Fall
BIOETHIC/LAW (700): FDA Law and Policy
RELIGION (700): Islam, Medicine and Healing
CULANTH/LSGS/RIGHTS/ICS (200): Cultures and Politics of the America Borderlands
CULANTH (000): Studies in Special Topics: Food & Film

Only in 20' Spring
XTIANEDU (800): Eating Together Faithfully: Education for Christian Foodways
EOS/ENVIRON (300): Changing Oceans
ECON/ENVIRON/GLHLTH/POLSCI/PUBPOL (200): Food, Env, Health & Pubpol
DOCST (200): Feeding Diaspora: Global Food Stories and Audio Journalism
TIBETAN (100): Elementary Tibetan II

Only in 20' Fall
ENVIRON/GLHLTH (300): Planetary Health: Ecosystems, Human Health and Policy
Courses that were discontinued (Pt 2)

Only in 21' Spring
LAW (600): Ad Hoc Tutorial: Food Justice
PUBPOL (700): Special Readings in Public Policy Studies: Race Equity in Global Foodwork
AAAS SOCIOL ICS (300): Pigging Out: The Cultural Politics of Food

Only in 21' Fall
PARISH (800): Global Food Policy
ENVIRON (300): Introduction to Environmental Life Cycle Assessment: Applications to Food Systems
CULANTH/ROMST/SOCIOL/ITALIAN (300): Food, Culture and Society
BIOLOGY/ENVIRON (200): Food and Fuel for a Growing Population: Nuts and Bolts of Plant Growth and Production
AAAS/DANCE/THEATRST (300): The Black Parades: African Diaspora Parade Culture and Radical Resistance

Only in 22' Spring
PARISH (800): Seminar in Contemporary Ministries: Food and Health
Courses that were discontinued (Pt 3)

**Only in 22' Fall**
- PUBPOL (800): Hertie Study Abroad: Special Topics- The Politics of Food
- AAAS/VMS (400): Black Thought & Creativity to 1865 (only 22' Fall)

**Every year up till 22' Fall**
- PARISH (800): Charitable Food
- BIOLOGY (700): Food Web Theory

**Only in 23' Spring**
- I&E (400/700): I&E Capstone- Foodpreneurs
- ITALIAN (300): Global Italy
- ARTHIST/CLST/CULANTH (300): Art of the Meal: Alcohol and Feasting in the Ancient World

**Only offered for 2 semesters**
- PUBPOL (700): Special Topics in International Development Policy: Food Security and Development (22’ 23’ Spring)
- CULANTH/DOCST/VMS/LSGS/RIGHTS (300): Farmworkers in North Carolina: Roots of Poverty, Roots of Change (21’ and 22’ Spring)
- CULANTH/DOCST/ICS (200): Our Culinary Cultures (Spring & Fall 20’): big hit! both classes were full.
Revived Courses

CULANTH/ICS (200): Stimulants and Society

PUBPOL (800): Advanced Special Topics in Public Policy: Food Policy (20' Spring. Changed later to US Food Policy)

PARISH (800): Caring for Creation: only in 20' Fall (Sounds a lot like Education for Creation Care)

BIOLOGY (100): Environmental Justice and Equity: only in 21' Spring (later: Envir Justice for Env Prof)

ENVIRON (500): Should I Eat Fish? Economics, Ecology and Health

HISTORY (300): Feast and Famine: Food in Global History

AMES/HISTORY/EAS (500): Travel Japan
22 Regular courses

**BIOLOGY**
- BIOLOGY(300): Plants and People
- BIOLOGY/NEUROSCI (200): Mechanisms of Animal Behavior*

**ECOLOGY**
- BIOLOGY/GLHLTH/ENVIRON (100): Climate, Coffee, and Coronavirus: Why Ecology Matters to Human Health*
- BIOLOGY (100): Where Did Food Come From? The Ecology of Farming*
- BIOLOGY (200): The Ecology of Human Health

**MARINE SCI**
- ENVIRON (800): International Fisheries Policy: Principles and Concepts Aiming to End Overfishing*
- ECS/EOS (500): Ocean & Freshwater Pollution: Sources and Impacts
- BIOLOGY/ENVIRON/MARSCI (200): Marine Megafauna*

**LAW & POLICY**
- PARISH (800): US Food Policy
- ENVIRON/LAW (500): Food, Agriculture and the Environment: Law and Policy*
- ENVIRON (500): Environmental Justice: Theory & Practice for Environmental Scientists and Policy Professionals
- ENVIRON/LAW/PUBPOL (500/700): Risk Regulation in the United States, Europe, and Beyond*

**SOCIAL SCIENCES**
- XTIANEDU (700): Education for Creation Care
- HISTORY/PUBPOL/ICS (300): North American Environmental History
- CULANTH/FRENCH/ICS (300): Manger: Foodways and Food Systems*
- CULANTH/LIT/AADS/AMES (200): Foods that Make Us Human*
- ENVIRON/GLHLTH/GSF (200): Food, Farming and Feminism*

**BUSINESS**
- Climate, Sustainability and Corporate Governance
- Edge Seminar Series* (spring= food & ag is one topic)

**AREA STUDIES/HUMANITIES**
- SPANISH (300): Global Humanities in Spanish
- AMES/HISTORY/ICS (200/300): Modern & Global India
- CHINESE (400): Issues in Chinese Language & Society I
A Reflection

Many courses at Duke touch on food and several cover the intersection of food and climate as a subtopic.

Gaps are found in the Psychology, Chemistry, Engineering, Finance, and Nursing departments.
PART 2

Interviews of Sustainability Professionals
Methods

- Posed a question on “Ask a Blue Devil”
  - Requested for informational interviews
- Met virtually with 8 Duke Alumni who have done work in food systems sustainability
- Meeting Aims:
  - Get to know the work they’ve done (Can they be potential guest speakers for the class?)
  - Ask for advice on designing the future food-climate class at Duke
<table>
<thead>
<tr>
<th>Person</th>
<th>Profession</th>
<th>Sector</th>
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<tbody>
<tr>
<td>A</td>
<td>Senior Scientist</td>
<td>Large envir NGO</td>
</tr>
<tr>
<td>B</td>
<td>Chief Sustainability Officer</td>
<td>Large seafood company</td>
</tr>
<tr>
<td>C</td>
<td>Sustainability Director</td>
<td>Multinational Financial Firm</td>
</tr>
<tr>
<td>D</td>
<td>Sustainability Strategist</td>
<td>Multinational F&amp;B Company</td>
</tr>
<tr>
<td>E</td>
<td>Finance &amp; Business Consultant</td>
<td>Consulting &amp; Finance</td>
</tr>
<tr>
<td>F</td>
<td>Product Sustainability Analyst</td>
<td>F&amp;B Start-up</td>
</tr>
<tr>
<td>G</td>
<td>Food Waste Specialist</td>
<td>Large envir NGO</td>
</tr>
<tr>
<td>H</td>
<td>Development Consultant</td>
<td>Consulting &amp; Int. Development</td>
</tr>
</tbody>
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Their Advice

Cover fundamental topics at the food-climate nexus
Such as: Land-use change, carbon footprint of different foods, climate adaptation and resilience, regenerative agriculture, action-oriented solutions

Engage with stakeholders across the food system
Directly connect students with the food production system—visit farms, talk to people who work in major food companies, bring in guest speakers

Incorporate work from environmental NGOs & IGOs
Project Drawdown, WRI, WWF, The Nature Conservancy, FAO, WFP, Conservation International, SBTi
PART 3

Some Ideas for the Course

- Encourage attending food conferences or symposiums
- Engage with Duke Campus Farm
- Engage with Duke Dining
- Conduct info interviews with food professionals
- Understand Duke’s Climate Commitment
- Client-based design projects
- Deep dive into LCAs of food