



Abschlussbericht Fellowship für Innovationen in der Hochschullehre

Sustainability Lab

Juli 2016

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Beschreibung der Lehrinnovation

Die Lehrinnovation beinhaltet ein Kursformat, das im Rahmen einer konkreten Lehrveranstaltung, dem "Sustainability Lab", erprobt wurde. Dieses Kursformat wurde in drei unterschiedliche Module differenziert: *Inspire, Explore* und *Develop*.

Ziel der Lehrinnovation ist es gewesen, dieses modular aufgebaute Kursformat zu entwickeln, zu testen und zu etablieren, das einen Transfer zwischen Universität, Praxis und unterschiedlichen Fächern ermöglicht und dessen Inhalte interaktiv und multimedial aufbereitet werden.

Das Modul *Inspire* ist so angelegt, dass die Studenten innerhalb einer etwa zwei- bis dreiwöchigen Periode heterogene Lehrinhalte zum Thema Sustainability vermittelt bekommen, darunter auch aus angrenzenden Bereichen wie Innovation, Entrepreneurship, Produktion und Logistik. Die Heterogenität der Inhalte stellt eine Herausforderung für das Format dar: Im Gegensatz zu traditionellen Vorlesungen ist es bei fächerübergreifenden Lehrinnovationen notwendig, dass Experten aus den jeweiligen Themenbereichen Vertiefungseinheiten übernehmen. Damit erhalten die Studenten sehr gezielte und fundierte Ausschnitte aus wichtigen Themenbereichen und können ihr Wissen je nach Bedarf und Projekt erweitern.

Das Modul *Explore* ist darauf ausgerichtet, die Studenten an die Fallanalyse und Projektarbeit heranzuführen. Es beinhaltet eine Dauer von etwa vier bis sechs Wochen. Im ersten Schritt kommen die Studenten in Kontakt mit dem Fall und der Industrie, z.B. durch Besuche bei den entsprechenden Firmen. Bei größeren Kursen kann hier alternativ auch die Wahl eigens von den Studenten gewählter Themenschwerpunkte in Frage kommen, die im weiteren Kursverlauf schrittweise auf innovative Lösungen hinarbeiten. In einem zweiten Schritt werden konkrete Tools und Werkzeuge vermittelt, z.B. aus dem Bereich Design Thinking. Ein dritter Schritt dient der weiteren Erarbeitung des entsprechenden Projektes anhand der konkreten Tools und Werkzeuge, mit dem Ergebnis einer ersten Ideenentwicklung und Präsentation der Studenten sowie der konkreten Workshop-Vorbereitung.

Im Modul *Develop* entwickeln die Studenten gemeinsam mit Experten und den Projektpartnern konkrete Lösungskonzepte. Diese bauen auf ersten Ideen und Erfahrungen der vorangegangenen Phase auf. Grundidee dabei ist, dass heterogene Teams im Rahmen eines Workshops innovativere Lösungen entwickeln können als



einzelne Personen oder firmeninterne Teams. Innovativ ist dabei, dass sowohl heterogene Studententeams (Studenten unterschiedlicher Fächer) als auch Manager unterschiedlicher Abteilungen und Funktionen und zusätzlich eingebundene Experten zusammenarbeiten.

Zusätzlich zu den inhaltlichen Komponenten sollten im Rahmen der Lehrinnovation auch unterschiedliche digitale Techniken und Formate getestet werden. Das Fellowship hat in diesem Bereich die Möglichkeit gegeben, die nötige IT Komponenten als auch Prozesse einzuführen und diese in unterschiedlichen Modulen und Prototypen zu experimentieren. Hierfür hat der eigentliche Kurs, das Sustainability Lab als Basis gedient. Über die Laufzeit des Fellowships hinaus gab es aber vor allem im Bereich der Digitalisierung sehr positive Effekte für andere Kurse und Formate, die durch das Fellowship ermöglicht wurden.

Erreichte Ziele der Lehrinnovation

Vermittlung der theoretischen Basis

Im Rahmen des Kurses bestand ein Hauptziel in der Vermittlung des theoretischen Rüstzeugs bzw. der theoretischen Basis für komplexe Themen und Problemstellungen. Im Rahmen der Vorlesungseinheiten wurden den Studenten die entsprechenden Lehrinhalte, die das Thema Sustainability umfasst, durch die Experten anschaulich anhand von angewandten, praktischen Beispielen vermittelt und interaktiv diskutiert. Die vielfältigen Lehrinhalte boten den Studenten viele unterschiedliche Ansatzpunkte für Projekte und Lösungen. Je nach Präferenz vertieften die Studenten ihr Wissen weiter hinsichtlich spezifischer Inhalte und konnten aufbauend auf diesem Wissen ihre weitere Arbeit strukturieren; diese Arbeitsschritte der Studenten umfassten ebenso einen fortwährenden Austausch mit den entsprechenden Experten.

Ableitung geeigneter Modelle und Werkzeuge

Ein weiteres Ziel bestand darin, geeignete Modelle und Werkzeuge in Hinblick auf die konkreten Projekte abzuleiten.

Die Modelle und Werkzeuge halfen den Studenten dabei, ihre Projekte zu strukturieren, Erkenntnisse abzuleiten und zu ordnen, weiter zu vertiefen und im späteren Kursverlauf auf mögliche Problemlösungsansätze zu fokussieren. Im Verlauf des Kursformats wurde



deutlich, dass entsprechende Modelle und Werkzeuge, z.B. Design Thinking, insbesondere dann effektiv in den Projekten angewendet werden konnten, wenn die Studenten in der Vorlesung Schritt für Schritt die mit den Modellen und Werkzeugen verbundenen Arbeitsprozesse kennenlernen und unmittelbar umsetzen konnten. Die Unterstützung der Teams durch umfangreiche Workshops mit In-Class Coaching trug zu einer zielführenden Anwendung der Modelle und Werkzeuge und zu einer konsistenten und fundierten Fortentwicklung der Projekte bei.

Es wurde den Studenten im ursprünglichen Kursformat ein umfangreiches Set an Modellen und Werkzeugen bereitgestellt. Nicht alle Modelle und Werkzeuge wurden von den Studenten berücksichtigt, sodass in späteren Kursformaten kompaktere Sets mit nur einigen, dafür elementaren, Kern-Modellen und –Werkzeugen, insbesondere aus dem Bereich Design Thinking, bereitgestellt wurden und eine effektivere Projektarbeit ermöglichen konnten.

Einfache und zeitunabhängige Bereitstellung der Lehrinhalte

Die möglichst einfache und zeitunabhängige Bereitstellung der heterogenen Inhalte stellte ein weiteres Ziel des Kursformats dar. Dazu wurden zunächst gängige Kurs-Plattformen wie Moodle genutzt, um den Studenten einen unkomplizierten Zugriff auf Literatur, Videos und weiteres Lernmaterial zu ermöglichen. Ebenfalls unterstützten Design-Thinking-Plattformen wie Spacedeck den Projektentwicklungsprozess der Studenten-Teams, sodass die Projektschritte nachvollzogen werden konnten.

In der weiteren Entwicklung des Kursformats wurden den Studenten, z.B. auf Moodle, elektronische Inhalte wie u.a. kurze und kompakte Vorlesungs-Videos zu einzelnen Themen-Modulen, wie z.B. zur Einführung in das Thema Nachhaltigkeit, bereitgestellt. Entsprechend wurden die Module in den Kursverlauf integriert und die Studenten gefordert, sich diese Video-Module zeitunabhängig anzuschauen und zur Vorbereitung auf die Vorlesung bzw. Vertiefung der Vorlesungsinhalte zu nutzen.

Weitere Schritte zu einer umfassenderen elektronischen Bereitstellung der heterogenen Lehrinhalte sind nun besser umsetzbar und werden in Zukunft in weiteren Kursen an der WHU eingesetzt.



Füllen der Lücke zwischen klassischer Lehre und Projektarbeit

Das Füllen einer Lücke, die normalerweise zwischen klassischen Lehreinheiten und Projektarbeit entsteht, war ebenso Ziel des Kursformats.

Im anfänglichen Kursformat wurde nochmals deutlich, dass die eigenständige Erfassung und Strukturierung der Projekte eine zentrale Herausforderung für die Studenten darstellt, hierbei insbesondere die konsistente und nachvollziehbare Anwendung und fundierte Argumentation der komplexen Themen-Projekte basierend auf verbundenen Lehrinhalten. Eine erste Verarbeitung der Lehrinhalte für die Projektarbeit der Teams erfolgte über von Studenten eigenständig geführten individuellen und Team-Wikis/Blogs sowie mithilfe von im Kurs vermittelten Strategien und Modellen. Qualitativ hochwertige, projektbezogene Wiki-/Blog-Beiträge der Studenten wurden ausgewählt zur Veröffentlichung im WHU Sustainability Blog auf der offiziellen WHU-Website (https://www.whu.edu/fakultaet-forschung/entrepreneurship-andinnovation-group/unternehmertum-und-existenzgruendung-i/sustainability-blog/). Im späteren Kursformat unterstützen Modelle und Werkzeuge, vor allem aus dem Bereich der hypothesentestenden und experimentellen Verfahren (Annahmen werden in Hypothesenformat formuliert und auf Grund von Daten verworfen oder akzeptiert), die Studenten besonders effektiv und anschaulich dabei, die in den klassischen Lehreinheiten vermittelten Erkenntnisse sowie die Datenrecherche möglichst effektiv für die Projektarbeit aufzuarbeiten bzw. weiter zu verarbeiten.

Entwicklung gemeinsamer Lösungen von Firmenpartnern, Studenten und Experten

Ein letztes Ziel bestand darin, dass Firmenpartner, Studenten und Experten gemeinsam Lösungen entwickeln, die von den Projektpartnern alleine nicht identifiziert und entwickelbar wären.

Das anfängliche Kursformat beinhaltete eine Projekt-Kooperation mit dem Industrieverband Papier- und Folienverpackung e.V. (IPV). Hierbei wurde dem Kurs ein Besuch der Studenten bei dem Unternehmen Meyer Stemmle (Mitglied des IPV) in Mülheim-Kärlich in der Nähe von Koblenz ermöglicht. Die Studenten erhielten einen eigenen Eindruck vom Unternehmen – aus der direkten Umgebung der WHU in der Region Koblenz –, der Produktion und dem Thema Verpackung und konnten sich mit verantwortlichen Unternehmern und Managern austauschen. Der Kursabschluss



beinhaltete die Präsentation und Diskussion der Projektergebnisse der einzelnen Teams mit weiteren Unternehmensvertretern und Verantwortlichen des IPV.

Im späteren Kursformat mit einer großen Anzahl an Kursteilnehmern hatten die Studenten die Möglichkeit, in den Räumlichkeiten des WHU-Partners ISSO (am Florinsmarkt in Koblenz) ihre Projekte der Öffentlichkeit vorzustellen und diese mit Firmenpartnern, anderen Studenten, Experten, interessierten Besuchern etc. zu diskutieren und weiterzuentwickeln. Die Ergebnisse der Projekte sowie der öffentlichen Projektvorstellung wurden von den insgesamt 17 Teams in Reports bzw. Abschlussberichte festgehalten. Diese umfassenden Berichte stehen auf dem WHU Sustainability Blog für Interessenten zur freien Einsicht und werden seit Abschluss des Kurses auch regelmäßig von der Industrie angefragt.

Barrieren bei der Zielerreichung

Stark variierende Kursgrößen wegen Pflicht- versus Wahlveranstaltung

Das Kursformat wurde im Bachelor-Kurs als Wahlfach angeboten, während der Kurs im Master als Pflichtveranstaltung von sämtlichen Studenten des Master-Jahrgangs zu belegen war.

Im Bachelor bestand für die Studenten die Wahl zwischen dem Kursformat sowie einem anderen Kurs. Für den Abschlussjahrgang 2015 gab es ein starkes Ungleichgewicht hinsichtlich der Teilnehmerzahl: Am Pilotkurs im Herbstsemester 2013 nahmen 19 Bachelor-Studenten (inkl. internationale Austauschstudenten) des Abschlussjahrgangs 2015 teil. Im Pilotkurs konnte ein Firmenbesuch realisiert und die In-Class-Arbeit effektiv umgesetzt werden.

Andererseits belegten insgesamt 178 Studenten, die verbleibenden Studenten desselben Jahrgangs, den Kurs im Frühjahrssemester 2015. Insofern wird, anders als im Pilotkurs, im Frühjahrssemester aufgrund der hohen Teilnehmerzahl ein größerer Fokus auf die elektronische Lehre und auf eine höhere Eigenverantwortung der Studenten gelegt, die elektronisch bereitgestellten Module zu belegen.

Im Master-Kurs wurde das Kursformat im Frühjahrssemester 2014 von über 100 Studenten belegt, nach dem Pilotkurs im Bachelor mit der vergleichsweise niedrigeren Teilnehmerzahl. Der Fokus lag im Master-Kurs auf der In-Class-Arbeit der



Kursteilnehmer. Angesichts der 100 Studenten war die adäquate Vermittlung der Lehrinhalte im Hörsaal umso komplexer.

Themenwahl und Ausrichtung des Kurses

Die Themenwahl orientierte sich im Pilot-Kurs sehr eng an den relevanten Themen für das IPV Verpackungscluster. Dementsprechend waren die Themen, die die Studenten in ihren Teamprojekten hinsichtlich Nachhaltigkeit bearbeiten konnten, begrenzt.

Im Master-Kurs lag ein genereller Themenschwerpunkt ebenfalls auf Nachhaltigkeit in Verpackung, wobei die Studenten hier eigenständige Präferenzen hinsichtlich möglicher spezifischer Themenbereiche äußern und in ihre Projekte einbringen konnten. Hier bestand eine Herausforderung der Studenten in der Eigenständigkeit bei der Identifikation relevanter und interessanter Themenbereiche und bei der anschließenden Ableitung geeigneter Projektansätze.

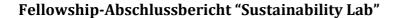
Im Bachelor-Kurs im Frühjahrssemester 2015 lag der Fokus auf Nachhaltigkeit im Bereich Sport (Olympia). Diese Neuausrichtung des Kurses sorgte dafür, dass unterschiedliche Präferenzen der Studenten hinsichtlich der Ausrichtung (Nachhaltigkeit in Verpackung versus Nachhaltigkeit im Sport) dafür sorgten, dass Studenten sich erst in die neue Themenausrichtung hineinfinden mussten.

Wahl des Projektformats

Im kleineren Pilot-Kurs war das Projekt mit dem IPV eher regional orientiert. In diesem Format war ein anschaulicher und tiefgehender Einblick für die Studenten in die Nachhaltigkeitsthematik am Beispiel des IPV möglich. Vereinzelt wurde von Studenten dieser Fokus auf das IPV bzw. Nachhaltigkeit in der Verpackungsindustrie kritisch, weil zu spezifisch, gesehen.

Im Bachelor-Kurs im Frühjahrssemester 2015 bestand eine Herausforderung für Studenten darin, den Zusammenhang zwischen Nachhaltigkeit und Sport (Olympia) optimal für die Projektentwicklung zu nutzen.

Im Master-Kurs waren die Nachhaltigkeits-Projekte weiter angelegt und konnten von den Studenten selbst gewählt werden. Aufgrund der hohen Teilnehmerzahl wurden Vorlesungseinheiten – vor allem in den Design-Thinking-Einheiten – so organisiert, dass in der einen Hälfte der Vorlesung eine Hälfte der Studenten im Hörsaal arbeitete, und die andere Hälfte der Studenten separat in der anderen Vorlesungshälfte zugegen war.





Die In-Class-Arbeit der Teams war produktiv und ermöglichte einen projektspezifischen Austausch zwischen den Teams und den Coaches bzw. Kursleitern; angesichts der hohen Teilnehmerzahl kann die Produktivität und Effizienz der In-Class-Arbeit weiter optimiert werden (siehe Lessons Learnt).

Lessons learnt

Mehr elektronische Lehre vor allem bei größerer Teilnehmerzahl

Die Erfahrungen mit dem Kursformat haben gezeigt (siehe oben), dass sich elektronische Lehre bei Kursen mit größeren Teilnehmerzahlen – je nach Ausgestaltung – sehr gut eignet. Die elektronischen Lehrelemente tragen dazu bei, dass die Studenten einen Überblick über die theoretischen und methodischen Grundlagen des Kurses erhalten und die Lehrinhalte weitgehend zeitunabhängig erlernen können. Neben elektronischen Lehrelementen, z.B. im *Inspire*-Modul, sind jedoch auch physische Treffen im Hörsaal weiterhin wichtig, um die Projekte zwischen Studenten und Coaches persönlich zu diskutieren und sie mit geeigneten Tools und Werkzeugen zu strukturieren. Wichtig ist hierbei, dass die Coaching-Einheiten bzw. Team-Gespräche in möglichst kleinen Gruppen stattfinden, sodass eine ergiebige Diskussion und Zusammenarbeit ermöglicht wird.

Kombination der Lehre mit der Praxis wichtig

Die Kooperation und Zusammenarbeit mit externen Experten, Organisationen und Firmen hat dazu beigetragen, dass die Studenten mit realen Projekten konfrontiert sind und dieser Austausch mit externen Partnern auch von den Studenten sehr wertgeschätzt wurde. Bei vielen Projekten ergab der vielfach sehr themenspezifische und tiefgehende Dialog zwischen den Studenten und externen Partnern noch entscheidende Fortschritte, die ansonsten ggf. nicht hätten erzielt werden können, indem die Partner z.B. von eigenen, langjährigen Erfahrungen berichten konnten. Vor allem das Thema Nachhaltigkeit hat deutlich gemacht, wie wichtig der Dialog zwischen Theorie und Praxis ist, sodass durch diese Projekte mit der Involvierung verschiedener Partner Nachhaltigkeit greifbar werden kann.



Projekte spezifizieren

Ebenso wurde deutlich, dass sehr spezifische Projekte mit Firmen bzw. Firmenclustern (siehe IPV-Projekt oben) am besten bei vergleichsweise kleinen Kursen funktionieren können. Entsprechend kann sich der Kurs mit einem Firmenbesuch kombinieren lassen bzw. erlaubt eine intensive und eingehende Diskussion und Kooperation zwischen den Studenten und den Firmenvertretern im Hörsaal.

Auch größere Kurse profitieren davon, wenn Projekte und damit eben auch der Begriff Nachhaltigkeit möglichst spezifisch und konkret abgesteckt sind.

Angesichts der Nachhaltigkeitsthematik ist es generell geboten, das Thema in anwendungsorientierter Weise zu spezifizieren, da der Begriff Nachhaltigkeit an sich relativ abstrakt ist und in vielen unterschiedlichen Bereichen und Zusammenhängen Anwendung findet.

Themenwahl für die Studenten möglichst flexibel halten

Spezifische Projekte bilden einen thematischen Rahmen, in dem sich die Studenten bewegen können. Dieser Rahmen bietet den Studenten einerseits eine Orientierung bei der Identifizierung möglicher vielversprechender Projektansätze. Andererseits erlaubt er den Studenten Freiheiten bei der Eingrenzung bestimmter Bereiche eines solchen Projektes. In diesem Rahmen können die Studenten basierend auf ihren Themen-Präferenzen ihr Projekt bzw. ihren Themenbereich identifizieren und vertiefen.

Verstetigung der Lehrinnovation

Der Pilotkurs des Sustainability Lab fand im Bachelor-Studiengang im Herbstsemester 2013 vom 19. September bis 10. Dezember statt (Syllabus im Anhang). Diesen Kurs betreute hauptsächlich Prof. Christoph Hienerth vom Lehrstuhl für Entrepreneurship und New Business Development. Weitere Experten im *Inspire*-Modul waren Prof. Christina Günther, Prof. Arnd Huchzermeier, Prof. Miriam Müthel, Prof. Sabine Rau sowie Prof. Stefan Spinler. Das Kernthema dieses Kurses war Nachhaltigkeit in der Verpackungsindustrie.

Im Frühjahrssemester 2014 vom 13. Januar bis 7. Mai belegte der gesamte Master-Studiengang – verpflichtend als sog. Capstone-Modul – das Sustainability Lab (Syllabus im Anhang). Neben den bereits o.g. Personen waren ebenfalls Dr. Isabel Creuznacher



sowie Prof. Harald von Kortzfleisch von der Universität Koblenz-Landau Teil der Vorlesung. Frau Dr. Creuznacher war ebenso im *Explore*-Modul zugegen. Kernthema dieses Kurses war die Nachhaltigkeit von Verpackungen.

Im Frühjahrssemester 2015 wurde der Kurs übergeben an Prof. Sascha Schmidt vom Lehrstuhl für Sport (siehe Syllabus im Anhang). Unterstützt wurde der Kurs weiterhin von Prof. Christoph Hienerth und Prof. Christina Günther. Kernthema dieses Kurses war erstmals die Nachhaltigkeit im Bereich Sport bzw. Olympia.

Im darauffolgenden Herbstsemester 2015 sowie Frühjahrssemester 2016 fand der Kurs ebenfalls in dieser Form statt (siehe Syllabi im Anhang).

Hinzugekommen ist seit dem Herbstsemester 2015 der Master-Kurs Finance Sustainability von Prof. Burcin Yurtoglu.

Auf Basis der im Zuge des Sustainability Lab herausgebildeten Aktivitäten der WHU im Bereich Nachhaltigkeit, wurde im April 2015 der erste WHU Sustainability Report herausgegeben (Report im Anhang). Ein neuer WHU Sustainability Report 2016 wird ebenso im Spätsommer 2016 veröffentlicht.

Übertragbarkeit der Lehrinnovation

Das Thema Nachhaltigkeit und der Transfer zwischen Universität und Praxis lässt sich in vielfältiger Weise auf weitere Bereiche der Lehre übertragen. So ist Nachhaltigkeit ein elementarer Bestandteil von sozialem Unternehmertum und ist entsprechend ebenso relevant im Bachelor-Kurs "Social Entrepreneurship" (bzw. "Creating Social Value"). Dieser Kurs, angeboten von Prof. Christoph Hienerth, widmet sich gesellschaftlichen Herausforderungen und sozialen Bedürfnissen in Deutschland und Europa mit dem Ziel der Entwicklung eines sozialen Geschäftsmodells mit nachhaltigem Mehrwert für die Gesellschaft. Die Themen, die den Ansatz für ein solches Geschäftsmodell bieten, waren z.B. Alterspflege, Förderung der Ausbildung von Kinden aus ärmlichen Verhältnissen, etc. Im Zuge der Flüchtlingskrise, eine der größten gesellschaftlichen Herausforderungen der Geschichte, fokussierte der "Social Entrepreneurship"-Kurs im Frühjahrssemester 2016 darauf, die Dimensionen der Flüchtlingskrise zusammen mit Flüchtlingen, Partnern der Caritas und der lokalen/regionalen Flüchtlingshilfe zu diskutieren und zu vertiefen und darauf aufbauend mögliche Geschäftsmodelle





gemeinsam herausarbeiten, die Aspekte der Flüchtlingsthematik mehrwertstiftend adressieren.

Mit dem "Social Entrepreneurship"-Kurs seit Anfang 2014 verbunden ist eine enge Kooperation und ein fachlicher/inhaltlicher Austausch des Lehrstuhls für Entrepreneurship und New Business Development von Prof. Christoph Hienerth mit dem Institute for Social and Sustainable Oikonomics (ISSO) in Koblenz unter der Leitung von Alexander Schabel und Martin Görlitz.

Ein Austausch hinsichtlich der Lehrinnovation bzw. innovativer/elektronischer Lehre generell findet auf internationaler Ebene statt, so vor allem im Rahmen der jährlichen Open and User Innovation Conferences. Zudem ist eine weiterführende Diffusion und Evaluation für den Herbst 2016 geplant: Christopher Smolka, wissenschaftlicher Mitarbeiter am Lehrstuhl, wird sich im Rahmen eines dreimonatigen Aufenthaltes in den USA mit Experten zum Thema innovative bzw. elektronische Lehre austauschen (siehe auch Begleitschreiben).

Neben den direkt für Sustainability und Social Value Creation orientierten Kursen hat das Fellowship auch einen Fortschritt in Richtung Digitalisierung erlaubt. Aufbauend auf ersten digitalen Experimenten wurde im Jahr 2015 eine Kooperation mit Iversity gestartet, um einen eigenen digitalen Kurs der WHU für das professionelle Segment bei Iversity zu gestalten. Thema dieses Kurses war Visualisierungen und visuelles Denken für Manager. (https://iversity.org/en/courses/visual-thinking-for-business-make-your-point).

Der Kurs ist im Herbstsemester 2015 angelaufen und wurde der umsatzstärkste Kurs in der Geschichte von Iversity. Auch international wurde dieser Kurs einer der erfolgreichsten (gemessen am Umsatz von etwa 100K EUR) und rangiert damit in den Top Ten Plätzen weltweit. Der erfolg dieses Formates hat zu einer Strategiegruppe für Digitalisierung an der WHU geführt, weitere Kurse stehen in der Entwicklung.





Anhang

- Syllabus: Sustainability Lab (Bachelor, Herbstsemester 2013)
- Syllabus: Sustainability Lab I (Master, Frühjahrssemester 2014)
- Syllabus: Sustainability Lab II (Master, Frühjahrssemester 2014)
- Syllabus: Sustainability Lab (Bachelor, Frühjahrssemester 2015)
- WHU Sustainability Report 2015



Course Syllabus

Bachelor of Science Program

- Fall Semester 2013 -

I. Instructors

Christina Günther Christoph Hienerth Arnd Huchzermeier Miriam Müthel Sabine Rau Stefan Spinler

Office Hours:

By appointment

II. Course Content

This course emphasizes gaining an understanding of theoretical and practical aspects of sustainability. This includes aspects of environmental, social and economic sustainability, i.e. students get to know the complete range of sustainable activities that companies can aim for and implement. During the course, the students will work on real projects provided from partner companies and will develop thoughts and concepts for implementation. The course is partitioned into three segments. In the first segment, the students attend lectures in different topics relating to sustainability. In the second segment, students search for and collect data dealing with the respective topic of the semester. This segment is mainly done over electronic tools (individual wikis and group wikis). In the last segment, students develop their thoughts and concepts and present their results to the partner companies. The overall development of the course will be openly presented and discussed on a sustainability blog hosted by WHU. On this blog, the public (including external companies and experts, as well as students from other universities and business schools) will be able to comment on the progress and work of the course.

This course provides the following learning objectives:

- Gaining knowledge and understanding in the concept/construct of sustainability
- Gaining knowledge in different aspects of sustainability, e.g., ecological, social and managerial aspects
- Getting to know different theoretical perspectives for sustainability which originate from various fields of research, such as innovation management, supply chain management, institutional theory, industry development and life cycle, measurement and modeling



- Learning how to set up, structure and complete data collection for a sustainability-related project
- Learning how to identify trends in sustainability
- Learning how to develop projects for implementing and measuring sustainability activities
- Learning how to use electronic tools for communicating and exchange of information (blogs and wikis)

We draw on literature dealing with sustainability, supply chain management, innovation management, industry development and economics, modeling and measurement.

Teaching Methods:

Lecture, electronic communication and exchange of information, in-class workshop, presentation, and discussion of own projects.

Applied theories and methods:

Life cycle analysis Supply chain and packaging Industry evolution and cluster dynamics Corporate social responsibility Institutional theory

Basic readings (literature will be listed for each class in the detailed course overview, further below):

The cluster concept and life cycle:

Padmore, T. and Gibson, H. 1998. Modelling systems of innovation: II. A framework for industrial cluster analysis in regions. Research Policy, 26(6): 625-641.

The many faces of sustainability: What we analyze and what we measure: Kiron et al. 2013. The Benefits of Sustainability-Driven Innovation. MIT Sloan Management Review, 54(2): 69-74.

Talbot, J. and Venkataraman, R. 2011. Integration of Sustainability Principles Into Project Baselines Using a Comprehensive Indicator Set. International Business & Economics Research Journal, 10(9): 29-40.

Sustainable packaging with cases from the fast moving consumer goods industry:

Minami, C., Pellegrini, D. and Itoh, M. 2010. When the Best Packaging is No Packaging. International Commerce Review: ECR Journal, 9(1/2): 58-65.

Walmart's Sustainability Strategy: 2010 Update, Stanford University, 21 p.



CSR Strategy Implementation - The Case of Sustainable Innovation

Husted, B. W. and De Jesus Salazar, J. 2006. Taking Friedman Seriously: Maximizing Profits and Social Performance. Journal of Management Studies, 43(1): 75-91.

McWilliams, A. and Siegel, D. S. 2011. Creating and Capturing Value: Strategic Corporate Social Responsibility, Resource-Based Theory, and Sustainable Competitive Advantage. Journal of Management, 37(5): 1480-1495.

Porter, M. E. and Kramer, M. R. 2011. Creating Shared Value. Harvard Business Review, 89(1/2): 62-77.

Individuals and Institutional Change:

Helms, W. S., Oliver, C. and Webb, K. 2012. Antecedents of settlement on a new institutional practice: Negotiation of the ISO 26000 standard on social responsibility. Academy of Management Journal, 55(5): 1120-1145.

Life cycle analysis (LCA):

Hawkins, T. R. and Matthews, D. H. 2009. A Classroom Simulation to Teach Economic Input-Output Life Cycle Assessment. Journal of Industrial Ecology, 13(4): 622-637.

http://techalive.mtu.edu/meec/module14/title.htm

Workshop preparation:

McGoff, C. 2012. The Primes: How Any Group Can Solve Any Problem. Wiley. New Jersey.



Structure of the course, including classes, content, literature and exam components:

Figure 1 provides a course overview:



Table 1 (further below) provides a detailed course overview. It includes the dates and rooms for each class. Furthermore, it shows the content for each class, the required and optional readings and the hand-in dates for the respective exam components.

The course is partitioned into three segments.

Segment 1: INSPIRE

In the first segment, the students attend lectures in different topics relating to sustainability:

Your task in this segment is to read the respective literature and to get an overview of important topics for sustainability. No grading components/assignments are due. In this segment, the case will be introduced.

Segment 2: EXPLORE

In the second segment, students search for and collect data dealing with the respective topic of the semester. After an initial kick-off meeting, in which groups present and discuss potential topics, this segment is mainly done over electronic tools (individual wikis and group wikis). Communication with the course instructor is held over coaching meetings with group representatives.

Your task in this segment:

In this segment, there will be specific assignments for each individual.

1st assignment/individual assignment:

- a) Reflection on the course topic, related literature and concepts
- b) Data collection:
 secondary data and identification of potential interview partners
 (→ groups then decide on the most valuable interview partners)
- c) Interview and summary (tracked over individual wiki, 35%)



 2^{nd} assignment/individual assignment: Identification of topic for group work (inclass assignment / workshop, individual work, 10%).

Segment 3: DEVELOP

In the last segment, the student groups develop their thoughts and concepts and finally present their results to the partner companies.

This segment will consist of two meetings: One WHU internal meeting in which teams present their research results as well as an appropriate workshop design and discuss the further development of topics and potential joint work across groups; a second meeting with the partner companies in which the teams present their final work and recommendations.

3rd assignment/group assignment:

Preliminary presentation of thoughts/trends/workshop design

This is a presentation in class in which the groups

- a) show the work of their data collection and discuss various potential topics for the final presentation;
- b) they also give a suggestion for the design of the workshop and presentation.

 (group work, 10%)

4th assignment/group assignment:

Final presentation of concept/thoughts

This assignment is a PowerPoint file that the teams present to the partner companies and also store on their group wiki. After final changes it will be uploaded on the WHU Sustainability Blog. (35%)

Additional individual grading component: Active participation. Students can earn up to 10% for their involvement in the projects and active participation in class discussion and important decisions for the progress of the projects and the course.



Summary of grading components and description of deliverables:

The grading in this course is composed of various individual and group components as outlined in the text. The individual components result from data collection and analytic work regarding reflections on theories and the collected data. The group components result from process work and the thoughts and solutions developed for the final presentation.

Assignment	%	Hand in date/period
Assignment 1: Individual wiki activity:		Ongoing activity between
Reflection and data collection	35%	mid-Sept. to Dec. 9th,
		2013, 23:59.
Assignment 2: Identification of topic		Document to be handed
	10%	in latest on Oct. 9 th , 2013,
		23:59.
Assignment 3: Preliminary presentation	on	Presentation to be held
	10%	on Nov. 27 th , 2013. Hand
	10 /0	in due Nov. 25 th , 2013,
		23:59.
Assignment 4: Final presentation	35%	Presentation to be held
		on Dec. 10 th , 2013. Slides
		to be handed in due Dec.
		9 th , 2013, 23:59.
Active participation 10%	10%	Ongoing during the
	1070	duration of the course.
Bonus – WHU Sustainability Blog (1% bonus for the overall grade per blog post)		



Descriptions and tasks for each assignment:

Assignment 1: Individual wiki activity:

Goal/outcome: Individual engagement and contribution.

Task: The group members individually search for and collect relevant data and present their research results on their individual wiki on a continuous basis. Every group member collects primary as well as secondary data.

You first develop an overview of your topic by searching for and collecting secondary data. Each student aims at collecting 20 references for secondary data that is connected to the topic of the group and the overall case. Data for instance comprises relevant news articles, research papers, books, blogs, webpages, etc.

Based on this initial insight from secondary data, every group member identifies potential interview partners and decides on the most valuable interview partners to be interviewed. Each individual identifies 3 potential interview partners and selects ONE to be interviewed. Before the interview, care is taken that there is no overlap with interview partners from other group members and other groups. In order to ensure that, we will provide a central table on Moodle on which all potential interview partners are listed so that each individual can check whether a person has already been identified.

Additionally, every team member regularly reflects on the data collection, the course topic, the respective literature and concepts on the individual wiki.

Design recommendation: In order to ensure that the individual wiki supports the progress of the group work throughout the course, the researched data is to be updated regularly, i.e. at least weekly.

Furthermore, it is critical to emphasize the relevance of the researched data for the case by means of regular reflection, i.e. at least weekly.

When you integrate new data on the individual wiki, there are two options: You EITHER upload a file and create a respective comment simultaneously (e.g., if reflection on papers, etc.) OR create a comment only (e.g., if reflection on news articles, books, blogs, webpages, etc.). The data research and reflection, respectively, shall be illustrated by using effective media, e.g., tables and figures. Eventually, the best contributions will be published on the WHU Sustainability Blog.

Due: (mainly during exploration phase, Oct./Nov.; due Dec. 9th, 2013, 23:59)

Criteria for grading:

- 1. Primary and secondary data collection
 - a. Primary data (potential interview partners): 3 per student; selection of ONE to be interviewed
 - b. Secondary data (articles, websites, blogs, databases, etc.): 20 per student



- c. Ensure relevance for the case (by argument and by data/reference)
- d. Prevent redundancy of content c1) on the individual wiki and c2) on the group wiki
- 2. Update data collection
 - a. Update at least weekly
- 3. Reflection on the course and the topic development
 - a. Maintain regular activity, i.e. reflect at least weekly
 - b. Explain relevance for the case by argument and/or data
 - c. Best contributions will be listed on WHU Sustainability Blog resulting in a 1% bonus for the overall grade per blog post

Assignment 2: Identification of topic:

Goal/outcome: For the first EXPLORE session on Oct. $10^{\rm th}$, 2013, we identify important topics for working on the case.

Process: The group collectively selects a maximum of 3 most relevant topics out of previously individually selected topics (see task below). Every group selects max. 1 topic from each field of sustainability (managerial, ecological, social).

As a further step, the course is framed by jointly discussing possible topic overlaps, joint work opportunities and relevant criteria that adequately evaluate the selected topics (e.g., measurability of the output, relevance, etc.).

Task (Your assignment): In order to reach the goal stated above, every student researches and eventually identifies a maximum of 3 potential topics individually in advance of the first EXPLORE session. In this context, every student selects max. 1 topic from each field of sustainability (managerial, ecological and social). The topics selected will be presented to the respective group. In effect, the individual topics form the basis for the final selection by the group (i.e. group of 5; max. 15 individual topics \rightarrow max. 3 group topics).

Design recommendation: The document to be individually handed in by every student presents a maximum of 3 topics from each field of sustainability and does not exceed 3 pages (font: Times New Roman, font size: 12 pt.). It is to be briefly demonstrated how each topic is related to the overall case. Moreover, selected references (e.g., articles, news, websites, blogs, etc.) support the relevance of the respective topic for the overall case.

Due: (October 9th, 2013, 23:59)

Criteria for grading:

- 1. 3 topics selected from each field of sustainability (managerial, ecological and social)?
- 2. Relevance for the case:
 - a. Argue in 2-3 sentences how each topic is related to the overall case
 - b. Argue with references (e.g., articles, news, websites, blogs, etc.) that the topic is related to the overall case



Assignment 3: Preliminary presentation:

Goal/outcome: Every group presents the results of their data collection and an appropriate workshop and presentation design to the other groups on a PowerPoint file.

Process: Based on the ideas presented, the groups coordinate and discuss the further development, resulting tools and trends of their topics and activities related to the final concept across groups. Besides, potential joint work opportunities are coordinated.

Simultaneously, feedback is provided by means of group-individual coaching.

Task (Your assignment): As a preparation, every group hands in a PowerPoint file sketching the results of the data research and suggesting an appropriate workshop and presentation design.

Design recommendation: The PowerPoint file to be handed in comprises 3 slides (font: Arial; font size (text): min. 14 pt.; font size (references): 8-10 pt.).

Slide 1 consists of an overview of the data collection.

On slide 2, potential implications and conclusions that can be gathered from the collected data shall be pointed out. That is, the slide elaborates on the specific topics, trends, tools, instructions, etc. for companies that can be deduced from the data.

For the respective concept to be presented and conveyed most effectively to the companies (see assignment 4), slide 3 forms critical prerequisites for the appropriate workshop and presentation design, such as the media employed, the presentation order, a uniform structure of the presentations, the follow-up of the presentation, etc.

Additional research results, such as further literature, calculations, audio and video files, etc., may optionally be provided on the respective group wiki.

Due: (November 25th, 2013, 23:59)

Criteria for grading:

PowerPoint file

- a. 3 slides?
- b. Type and quality of data
- c. Analytic strength, i.e. quality of results and argumentation
- d. Innovativeness of topics/trends/results
- e. Creativity regarding workshop design
 - i. Arguments to ensure good exchange between groups
 - ii. Arguments to ensure good exchange with partner companies
 - iii. Time management for the workshop



Assignment 4: Final presentation:

Goal/outcome: Every group presents its final concept and thoughts including an action plan to the partner companies.

Task (Your assignment): The groups prepare a PowerPoint file containing their respective final concept and store the respective file on their group wiki. The presentation shall also elaborate on the concrete tools and activities critical for the concept to be implemented.

Design recommendation: To be discussed in session 5.

Due: (December 9th, 2013, 23:59)

Criteria for grading:

- 1. Time accuracy
- 2. The final concept
 - a. Why?/How?/What is the solution?
 - b. Beneficiaries and values delivered
 - c. Technology involved
 - d. Constraints and issues
- 3. Actual solutions related to the problem posed?
 - a. Feasibility
 - b. Scalability
- 4. Support by relevant data (and calculations)
- 5. External evaluation
 - a. Evaluation of the presentation by the respective company
 - b. Evaluation of the presentation by the course instructors
 - c. Publication on the WHU Sustainability Blog possible (quality!)?

ACTIVE PARTICIPATION:

The involvement in the projects and active participation in class discussion as well as important contributions for the progress of the projects and the course.



Groups:

You will be working in groups of 5 people. Groups can be chosen freely, but should respect the suggestions by the Dean concerning heterogeneity, i.e. integration of exchange students (Tauschies). Thus, all groups have to include 1 or 2 exchange students. Once groups have been formed, there is no exchange between groups during the ongoing run of the course. Please send your group information (i.e. names of group members) to Christopher Smolka after the second class at the latest (due Sept. 21st, 2013, 23:59).

Setting up your individual wiki:

Set up your individual wiki due Sept. 21st, 2013, 23:59, and report on first activity. Details on how to set up your individual wiki will be shown in class.

Setting up your group wiki:

Set up your group wiki promptly when your group is registered on Moodle. The registration will be communicated to you by email. Details on how to set up your group wiki will be shown in class.

Using the WHU Sustainability Blog:

The WHU Sustainability Blog is exclusively provided for excellent contributions selected by the course instructors.

Module Inspire (19.9.2013-25.9.2013)

First class:

19.9.2013, K-001; 15.30-18.45

1) Introduction to the course (Prof. Christoph Hienerth)

Content: In this first session, you will get an overview of the processes and main modules of the course. You will get introduced to the case and the partner companies. Furthermore, we will build the groups of five people, each. Finally, we will discuss some central aspects of sustainability.

Your task:

- Read and prepare the literature before the session
- Group in teams of five people, each team including one or more Tauschie(s) (due Sept. 21st, 23:59)

Literature:

Kiron et al. 2013. The Benefits of Sustainability-Driven Innovation. MIT Sloan Management Review, 54(2): 69-74.

2) Life cycle analysis (Prof. Stefan Spinler)

Content: An important concept for sustainability in manufacturing and the transport of goods is life cycle analysis. In this class, you will get a basic understanding of the concept.

Your task:

• Read and prepare the literature beforehand

Literature:

Hawkins, T. R. and Matthews, D. H. 2009. A Classroom Simulation to Teach Economic Input-Output Life Cycle Assessment. Journal of Industrial Ecology, 13(4): 622-637. http://techalive.mtu.edu/meec/module14/title.htm

3) Sustainable packaging (Prof. Arnd Huchzermeier)

Content: In the second part of this class, we go right into the core topic of the current semester: Sustainability in packaging. We discuss aspects related to sustainability with cases from the fast moving consumer goods industry.

Your task:

• Read and prepare the literature beforehand

Literature:

Minami, C., Pellegrini, D. and Itoh, M. 2010. The Best Packaging is No Packaging. International Commerce Review: ECR Journal, 9(1/2): 58-65.

Walmart's Sustainability Strategy: 2010 Update, Stanford University, 21 p.

Packaging in the Sustainability Agenda: A Guide for Corporate Decision Makers by ECR Europe and Europen, 2009.

Second class: Company visit (Prof. Christoph Hienerth)

Saturday, September 21. Bus transfer will be organized. Attendance required! Company visit: Meyer Stemmle, Mülheim-Kärlich (http://www.meyerstemmle.de); meeting point and time: Bus stop Vallendar-Mitte, direction: Bendorf, at 9:30 am

Third class:

25.9.2013, K-101; 15.30-18.45

1) Industry and cluster development (Jun. Prof. Christina Günther)

Content: In this class, you will learn how clusters develop and what influences shape their development.

Your task:

• Read and prepare the literature beforehand

Literature:

Padmore, T. and Gibson, H. 1998. Modelling systems of innovation: II. A framework for industrial cluster analysis in regions. Research Policy, 26(6): 625-641.

2) Individuals and institutional change (Prof. Sabine Rau)

Content: In this part of the class, we investigate the role of individuals and individual firms in the development and shaping of industries and clusters.

Your task:

• Read and prepare the literature beforehand

Literature:

Helms, W. S., Oliver, C. and Webb, K. 2012. Antecedents of settlement on a new institutional practice: Negotiation of the ISO 26000 standard on social responsibility. Academy of Management Journal, 55(5): 1120-1145.

3) CSR strategy implementation – The case of sustainable innovation (Prof. Miriam Müthel)

Content: In this part of the class, we investigate the role and responsibility of firms and individual managers in developing responsible strategies.

Your task:

Read and prepare the literature beforehand

Literature:

Husted, B. W. and De Jesus Salazar, J. 2006. Taking Friedman Seriously: Maximizing Profits and Social Performance. Journal of Management Studies, 43(1): 75-91.

McWilliams, A. and Siegel, D. S. 2011. Creating and Capturing Value: Strategic Corporate Social Responsibility, Resource-Based Theory, and Sustainable Competitive Advantage. Journal of Management, 37(5): 1480-1495.

Porter, M. E. and Kramer, M. R. 2011. Creating Shared Value. Harvard Business Review, 89(1/2): 62-77.

Module Explore (26.9.2013-26.11.2013)

Fourth class:

10.10.2013, E-102; 15.30-18.45

Content: In this class, we will start the case work and data collection.

Components:

- Identification of topics for groups
- Development of a search strategy
- Identification of valuable secondary and primary data
- Condensing and analyzing data for a case
- Trend identification

Your task:

- Read and prepare the literature beforehand
- Individuals: Research and select topics beforehand and present topics to group
- Groups: Prepare strategies to collect data
- Groups: Discuss individuals' topics
- Groups: Select most relevant topics
- Groups: Discuss and frame the content and structure of the further run of the course

Literature:

Talbot, J. and Venkataraman, R. 2011. Integration of Sustainability Principles Into Project Baselines Using a Comprehensive Indicator Set. International Business & Economics Research Journal, 10(9): 29-40.

Module Develop (27.11.2013-10.12.2013)

Fifth class:

27.11.2013, K-001, 15.30-18.45

Content: In this class, groups will present the results of their data research and will also discuss elements for the workshop design (structure of the last class).

Components:

- Presentation of the results of the data collection as well as of the suggested workshop design
- Discussion about the ideas presented and resulting possible tools and activities related to the respective final concept
- Discussion about the workshop design framing of the final workshop, Dec. 10th
- Group-individual coaching

Your task:

- Groups: Prepare and present your research results and your suggested workshop design
- Groups: Be prepared to report on your group wiki activity
- Individuals: Be prepared to report on your individual wiki activity
- Read and prepare the literature beforehand

Literature (for this class and the final workshop class):

McGoff, C. 2012. The Primes: How Any Group Can Solve Any Problem. Wiley. New Jersey.

Sixth class: Workshop 10.12.2013, E-102; 17.00-20.30

In this class, the groups will present their final concepts to the companies and discuss their recommendations with cluster representatives.



Course Syllabus

Master of Science Program

- Spring Semester 2014 -

I. Instructors

Isabel Creuznacher Christina Günther Christoph Hienerth Arnd Huchzermeier Harald von Kortzfleisch Miriam Müthel Sabine Rau Stefan Spinler

Office Hours:

By appointment

II. Course Content

This course emphasizes gaining an understanding of theoretical and practical aspects of sustainability. This includes aspects of environmental, social and economic sustainability, i.e. students get to know the complete range of sustainable activities that companies can aim for and implement. During the course, the students will work on real projects provided from partner companies and will develop thoughts and concepts for implementation. The course is partitioned into two segments and a final presentation.

In the first segment, the students attend lectures in different topics relating to sustainability.

In the second segment, students are doing field research; i.e. they search and collect data by observations and qualitative interviews with the respective topic of the semester. This will be achieved with the help of Design Thinking Tools and Methods. Group work can be assisted over electronic tools (e.g. Spacedeck).

In the last class, teams will present the results of their research.

The overall development of the course will be openly presented and discussed on a sustainability blog hosted by WHU. On this blog, the public (including external companies and experts, as well as students from other universities and business schools) will be able to comment on the progress and work of the course.



This course provides the following learning objectives:

- Gaining knowledge and understanding in the concept/construct of sustainability
- Gaining knowledge in different aspects of sustainability, e.g., ecological, social and managerial aspects
- Getting to know different theoretical perspectives for sustainability which originate from various fields of research, such as innovation management, supply chain management, institutional theory, industry development and life cycle, measurement and modeling
- Learning how to set up, structure and complete data collection for a sustainability-related project
- Learning how to identify trends in sustainability
- Learning how to develop projects for implementing and measuring sustainability activities
- Learning how to use electronic tools for communicating and exchange of information (blogs and Spacedeck)
- Learning and applying design thinking tools and methods

We draw on literature dealing with sustainability, supply chain management, innovation management, industry development and economics, modeling and measurement, and design thinking.

Teaching Methods:

Lecture, electronic communication and exchange of information, interactive inclass workshop, presentation, and discussion of own projects.

Applied theories and methods:

Life cycle analysis
Supply chain and packaging
Industry evolution and cluster dynamics
Corporate social responsibility
Institutional theory
Design Thinking

Groups:

You will be working in groups consisting of 6 people (with three sub-groups of two people).

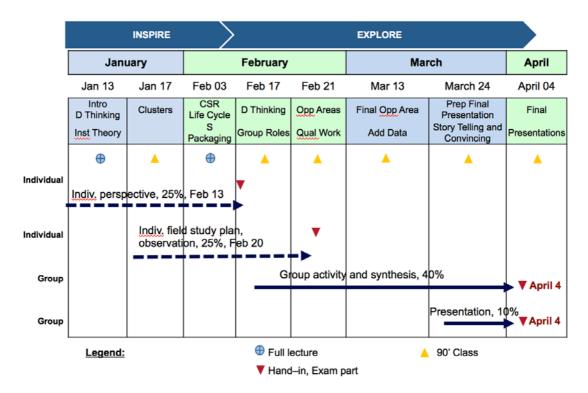
We will compose groups based on your individual interests given in your first assignment.

The grouping will be done before the second part of the course (field research).



Structure of the course, including classes, content, literature and exam components:

Figure 1 provides a course overview:



The course is partitioned into two segments.

Segment 1: INSPIRE

In the first segment, the students attend lectures in different topics relating to sustainability. Your task in this segment is to read the respective literature and to get an overall understanding and overview of important topics for sustainability.

<u>Ianuary 13, 2014:</u>

Introduction to the course (Prof. Christoph Hienerth)

Content: In this first session, you will get an overview of the processes and main modules of the course. You will get introduced to the case and the partner companies. We will discuss some central aspects of sustainability and its effects on business modeling.

Literature:

Kiron et al. 2013. The Benefits of Sustainability-Driven Innovation. MIT Sloan Management Review, 54(2): 69-74.



Design Thinking (Dr. Isabel Creuznacher / Prof. Dr. von Kortzfleisch)

Content: In this class you will get an introduction to the innovation approach "Design Thinking" and will get an overview of methods and tools and how those can be used during the segment EXPLORE. You will be led through the individual steps you have to undergo in your group work and the tasks that will be done during February and March.

Literature:

- Grots, A., Creuznacher, I. (2012), Design Thinking Prozess oder Kultur? Drei Fallbeispiele einer (Veränderungs-) Methode, ZOE Nr. 2/2012: 14-21
- Kortzfleisch, H.v., Mokanis, I., Zerwas, D. (2012), Introducing Entrepreneurial Design Thinking, Arbeitsberichte aus dem Fachbereich Informatik Nr. 5/2012: 3-18
- Electronic Handout (pdf on moodle): Bootcamp

Individuals and institutional change (Prof. Sabine Rau)

Content: In this part of the class, we investigate the role of individuals and individual firms in the development and shaping of industries and clusters.

Literature:

Helms, W. S., Oliver, C. and Webb, K. 2012. Antecedents of settlement on a new institutional practice: Negotiation of the ISO 26000 standard on social responsibility. Academy of Management Journal, 55(5): 1120-1145.

<u>January 17 (this will be a 90' lecture only):</u>

Industry and cluster development (Jun. Prof. Christina Günther)

Content: In this class, you will learn how clusters develop and what influences shape their development.

Literature:

Padmore, T. and Gibson, H. 1998. Modelling systems of innovation: II. A framework for industrial cluster analysis in regions. Research Policy, 26(6): 625-641.

February 3, 2014:

CSR strategy implementation – The case of sustainable innovation (Prof. Miriam Müthel)

Content: In this part of the class, we investigate the role and responsibility of firms and individual managers in developing responsible strategies.

Literature:

Husted, B. W. and De Jesus Salazar, J. 2006. Taking Friedman Seriously: Maximizing Profits and Social Performance. Journal of Management Studies, 43(1): 75-91.

McWilliams, A. and Siegel, D. S. 2011. Creating and Capturing Value: Strategic Corporate Social Responsibility, Resource-Based Theory, and Sustainable Competitive Advantage. Journal of Management, 37(5): 1480-1495.



Porter, M. E. and Kramer, M. R. 2011. Creating Shared Value. Harvard Business Review, 89(1/2): 62-77.

Life cycle analysis (Prof. Stefan Spinler)

Content: An important concept for sustainability in manufacturing and the transport of goods is life cycle analysis. In this class, you will get a basic understanding of the concept.

Literature:

Hawkins, T. R. and Matthews, D. H. 2009. A Classroom Simulation to Teach Economic Input-Output Life Cycle Assessment. Journal of Industrial Ecology, 13(4): 622-637.

http://techalive.mtu.edu/meec/module14/title.htm

Sustainable packaging (Prof. Arnd Huchzermeier)

Content: In the second part of this class, we go right into the core topic of the current semester: Sustainability in packaging. We discuss aspects related to sustainability with cases from the fast moving consumer goods industry.

Literature:

Minami, C., Pellegrini, D. and Itoh, M. 2010. The Best Packaging is No Packaging. International Commerce Review: ECR Journal, 9(1/2): 58-65.

Walmart's Sustainability Strategy: 2010 Update, Stanford University, 21 p.

Packaging in the Sustainability Agenda: A Guide for Corporate Decision Makers by ECR Europe and Europen, 2009.

<u>Individual Assignment 1: individual perspective on sustainability and the</u> case

Your first assignment will be a two-page document, in which you express your perspective on a specific type and area of sustainability and link that to the respective case. Further details are listed at the end of the syllabus.



Segment 2: EXPLORE

In the second segment, students use design thinking tools and methods in order to systematically develop innovative solutions within the chosen specific subject of the sustainability topic.

We will offer specific coaching in order to learn and apply design thinking along each step of development.

The design thinking process consists of six phases/steps (see Bootcamp pdf). For this course, especially the first 3 steps are important and will be our main working methods: Within the segment EXPLORE, we will undergo the first three steps which are (1) understand – (2) observe – (3) synthesize.

The steps (4) *ideation* until (6) *test* will take place during a separate course, part II of the sustainability lab.

In order to have easier discussions and more specific group work, we will split the class in the segment EXPLORE: Our available time slot of 3 hours will be divided into 2 sessions each consisting of 1.5 hours. Teams can then work independently on their projects and get coaching for another 1.5 hours.

February 17, 2014:

After a small repetition about the basics and core methods and tools of the innovation approach design thinking, the first focus lies on the team building process: The teams will be selected according to the individually chosen sustainability topics. Those teams will then work on the definition of team roles of each member for the further run of the project. Once you presented yourself as a team, you will start with the project work including the concrete preparation of the field study (stakeholder analysis // where and what will we observe? // whom will we interview? how do we do it?).

Goal of that lecture: You shall be able to carry out the first part of the qualitative field research until the next class on Feb 21; i.e. every individual is due to deliver a reasoned field study plan (whom to interview/ where to observe) and will conduct one concrete observation.

<u>Individual Assignment 2: individual field study plan and first observation</u>

Your second assignment will be a 2-3-page document: On the first 1-2 page you develop your individual field study plan, i.e. you list opportunities/situations, which are relevant and reasonable to conduct interviews and observations. On the third page you report on your first observation, especially report on the insights you gained. (Further details are listed at the end of the syllabus).

February 21, 2014:

Focus of that class is the visualization and preparation of the collected data. We will give you a demonstration of how to work with the information towards



finding specific "opportunity areas". After that you will get a detailed input on how to lead a design thinking interview and prepare the question guide.

Goal of that lecture: You shall be able carry out the further qualitative field research including interviews.

March 13, 2014:

Focus of that class is the final definition of the opportunity areas of each group. After the preparation of the collected data, each group will decide for one out of 3-4 defined opportunity areas that will be the basic for the ideation phase. Once the focus has been set on one opportunity area, you discuss anew what additional information (field research) you have to do in order to be "expert" in this opportunity area.

Goal of that lecture: You have decided for one opportunity area and you know what kind of additional data you need to collect (more observations/ interviews) within that new focus in order to complete your information base until the next class.

(Attention: the description of your 3-4 opportunity areas including the description of the process is part of your group assignment, see below at the detailed description of the assignments)

March 24, 2014:

Focus of that class is the preparation for the final group presentations on April 4.

Tools and goal of this lecture: You will learn the basics about storytelling and convincing others with your idea.

Group Assignment 1: documentation of group work and progress

Your group assignment is to build the information and insights from the data collected:

You need to document the process of the group and be able to argue for the specific outcomes of the group; i.e. you explain the problem field, then you illustrate the process where you got your inspiration by always explaining WHY you chose the settings or interviewees and what was the key insights you gained from observations. Then it will be easy to explain how you came to define your fields of innovation (opportunity areas) based on your insights and observations. You finish this project documentation with the derivation and formulation of opportunity areas.

You have to set up an electronic page (Spacedeck) on which all individual and group components of your research are shown.

Please find the details of this assignment at the end of the syllabus.

Final presentation group results - April 4, 2014:

For the last class, the student groups develop their specific results of the design thinking process. No report (Word) or PowerPoint file is required. The groups can present all the information they have collected on their group site (on



Spacedeck) or with every means that would suit the purpose. Required is that the presentations show the groups' reflections on the outcome of their studies, i.e. they show and are able to explain how the individual observations and data collections lead to specific patterns.

Group Assignment 2: group presentation

Your group presentation will be 5 minutes long: Take this as a "pitch" to present the results of your research in a clear and convincing way. You will present the final outcomes of your synthesis and relate that to the data you investigated. The short presentation format will leave room for questions and discussion between the teams.

Bonus points (for active participation and reflection):

Individual bonus points can be reached by the following activity:

Blog activity:

During the run of the semester, you will find lots of sources that are important for the topic of sustainability and for the specific case.

You can write your own interpretation of important sources you found in the sense of a blog post that could be interesting to your fellow students. If you manage to summarize and reflect/develop an important topic well, we will put it on the WHU Sustainability Blog. Each of these published posts will give you a bonus of 1%.



Summary of grading components and hand in date:The grading in this course is composed of various individual and group components as outlined in the text.

Assignment	%	Hand-in date/period
Individual assignment 1: Individual perspective on sustainability and the case	25%	February 13, 2014, 23:59
Individual assignment 2: Individual field study plan and observation	25%	February 20, 2014, 23:59
Group assignment 1: Information collection, opportunity areas and synthesis	40%	Between February 21, 2014, and April 4, 2014
Group assignment 2: Final presentation of results	10%	Presentation on April 4, 2014, in class
Bonus points / individual: For blog posts published on WHU Blog	1%	During the whole run of the class



Descriptions and tasks for each assignment:

Individual Assignment 1: Individual paper: your individual perspective on sustainability and the case

Due: February 13, 2014, 23:59

Goal/outcome:

The outcome is a two-page document. The first page summarizes your thoughts on specific sustainability topics, the second page covers the references/sources.

Format:

The first page is a table covering the following aspects:

Page 1:	
Overall type of	Here you have to choose between ecological, economical or
sustainability:	social sustainability
Specific aspect of sustainability:	Here you can make a more fine-grained description of a specific aspect of sustainability within the overall type of sustainability. Use 2-3 sentences max.
In a cutton t (n aval	In this part you can list arguments, why this specific aspect of sustainability is interesting to you.
Important/novel aspects of that specific aspect of	Argue e.g. for importance, novelty, relevance.
sustainability:	Also argue how that aspect impacts companies in general.
	In this part you have to link to the case.
Relevance for the	You need to argue why your specific aspect of sustainability
case:	might be interesting for the case and what the specific relevance is.
Page 2:	
Your list of	You need to cover between 10 - 20 secondary sources
references:	backing up your first page.

Criteria for grading:

Clarity of description

Value of information/insights (how interesting are your insights?)

Relevance (how relevant are your insights generally?)

Matching the case (how relevant are your insights specifically for the case?)

Number and quality of references (how well do the references back up your arguments?)



Individual Assignment 2: Individual paper: your field study plan and report on first observation

Due: February 20, 2014, 23:59

Goal/outcome:

A two-three page document in which you use one-two pages for the field study plan and one page for reporting on your first observation.

Page 1-2:

On the first two pages you list opportunities for field interviews and observations. You would argue why you chose the observation setting you chose and the interviewees. Your suggestions must match the topic of your first individual paper and/or the topic of your group.

Observation topics: specific situations & locations *Interviewees* will be a mixture of different stakeholders: i.e.

- <u>Individuals</u> = extreme users (negative or positive), customers in different lifestyles, age or phase of life
- Companies = suppliers, service providers, producer,....;
- Organizations, institutions

Once you defined your objects, you need to decide which method of observation you use in the particular case (input on observation methods will be given in class)

Next to the possibility/realizability of your chosen observation objects, you need to argue for interview opportunities that are doable (realizable).

Person,	1. Short description of the <i>relevant</i>	Method of
company,	background (name, age, occupancy,	observation
situation	favorite interests, etc)	
	2. Evaluation regarding relevance,	
	realizability (user behavior, character	
	job position, key activities)	
Person,	1. Short description of the <i>relevant</i>	Method of
company,	background (name, age, occupancy,	observation
situation	favorite interests, etc)	
	0. 7. 1	
	2. Evaluation regarding relevance,	
	realizability (user behavior, character	
	job position, key activities)	
Etc.		

Etc.
Page 2 or 3:

Detailed reflection of your first observation. Concrete instructions for this page will be given in class.



Criteria for grading:

Clarity of description

Value of information/insights (how interesting are your suggestions?)

Relevance (how relevant are your suggestions?)

Matching the case (how relevant are your suggestions specifically for the case?)

Number and quality of suggestions

Criteria for the quality of observations and structure of your report will be given in class



Group Assignment 1: Information collection and synthesis

Due: April 3, 2014

Goal/outcome:

Your group contributes to the overall class project, which is to explore different aspects of sustainability and possible measurement forms for a specific case. The goal of this assignment is to follow the work of the data collection and to see how the analysis/synthesis of the data collected is done.

The group needs to track their project on an electronic platform on which the data collection and main results are updated and the final synthesis of the project is visible. We suggest that you use Spacedeck (spacedeck.com) for that group work.

During that process, the groups need to describe the 3-4 opportunity areas identified as well as the information about how the group generated those results.

Criteria for grading:

Quantity and quality of data Clarity of work Quality of presentation of work on the group page Regularity of contributions

Groups are composed of six members, which provides an opportunity to form sub-teams of two or three people. Groups can decide freely whether they want to have one grade for the overall group work or grades for the sub-teams of people working on specific tasks. In the later case you need to document the respective work processes and outcomes of the sub-teams.



Group Assignment 2: Presentation of results

Due: April 4, 2014, in class

Goal/outcome:

Finally, the groups present the work they have done and the relevance for the case.

Your group presentation will be 5 minutes long and focus on the results of your research. You will present the final outcomes of your synthesis and relate that to the data you investigated. The short presentation format will leave room for questions and discussions between the teams regarding the overall goal of the course, identification of sustainability aspects and their measurement.

Criteria for grading:

Clarity of presentation
Quality of data
Quality of results
Connection between data collected and results/synthesis
Relevance for the case

For the presentation of the results, the class will again be split into two parts so that better discussion and interaction is facilitated.



Course Syllabus

Master of Science Program

- Spring Semester 2014 -

I. Instructors

Christoph Hienerth

II. Course Content

This course builds on the results of the course Sustainability Lab I.

Main component:

The main component of the Sustainability Lab II is a workshop day on which the public (including managers, students, and interested persons) can see and discuss the results of the students' work from the first part of the course.

Goal:

Goal of this part of the course is to collect the opinions of the different groups of people attending the workshop and to develop a final document including the data and results of the course Sustainability Lab I and the reflections from the interactions and discussions from the workshop day.

Structure/timing:

On the workshop day, we will have the following main parts (and related work packages in brackets):

May 7, Florinsmarkt Koblenz:

12h noon: teams arrive and prepare their information stands

(Teams need to prepare poster and information material to show their prior work from Sustainability Lab I)

<u>2pm: official opening of the workshop, attendees discussing the work of the students until 5pm</u>

(Teams need to prepare questions for the different groups of people attending: managers, students from other studies/lines and the general public; teams have to decide upfront what they want to ask/discuss with the different groups)

5pm: round table

(Teams just need to attend the round table discussion, no prior work required)

III. Groups

We will be working with the same groups as in the first part of the course. Workload will be adapted to the remaining team size (find detailed instructions below, part VI: Differences regarding team size).



IV. Assignment

The assignment is a final written report that summarizes the work of the groups from the Sustainability Lab I and II.

It is divided into the following main parts:

(These parts should have equal weight in the assignment. However, groups can decide on which parts to put focus on).

Part I: Summary of information from Sustainability Lab I

In the first part of the report the teams briefly summarize their results from the Sustainability Lab I. This includes the overview and description of the opportunity areas and the underlying data/references.

Criteria:

- Is the overall idea of your work well understood and easy to grasp?
- Is there a good overview of your work, also graphically?
- How well can you describe which data led to the results you came up with?
- What are some contradictions in your data? How did you deal with those in your work?
- Why and how did you come up with exactly those opportunity areas you developed?
- Are the opportunity areas well described?

Part II: Results and reflections from the workshop day

In this part, the groups will summarize the information they gather at the workshop day. This will include the information from the different groups of people attending the workshop (e.g. managers, students, general public) relating to the opportunity areas of the group:

It should be described in detail how different groups of people react to different opportunity areas and which of those seem to be most promising. The teams need to describe the data they collect from the attendees and the reactions they receive on their work.

Criteria:

- What are the specific questions you prepared for different groups of people and why?
- What opinions did you collect during the workshop day from different groups of people (e.g. managers, students, general public)?
- How do these opinions relate to your work and in which way? How do they relate to your opportunity areas?
- What additional interesting aspects could you collect for your work?

Part III: Final reflections

In this part, the teams will resume their work and conclude with some key recommendations and reflections. Based on the data collected in both parts of

Sustainability Lab II, May 7, Florinsmarkt 15, Koblenz, 12 noon – 7pm



the Sustainability Lab, the teams need to come to a final statement about their area of sustainability and the specific opportunity areas.

The teams can also use that information from the attendees in order to propose some concrete further steps of development.

Criteria:

- What are the main conclusion points from your work? What do you critically reflect?
- What can you finally say about your opportunity areas?
- What are some concrete further steps that companies or also the public can take and why?
- What are your key recommendations and suggestions and why?

Appendix:

In the appendix, the teams provide all information about their data from both parts of the course (Sustainability Lab I and II).

This includes the following data:

- Information on interesting companies related to your topic/work (list the company and the reason why it was interesting for your work)
- Information on interesting individuals related to your topic/work (list the person, function and why that person was interesting for your work).
- All secondary data used for your work (magazines, journals, web pages, etc.)
- Some photos documenting your work (interviews, observations, workshop day)

No transcripts or quotes needed – just information on the sources you included in your work!

You can also provide electronic data for this section. In this case please forward a file or link.

We will provide a format for your final report uploaded on MOODLE.

V. Work tasks for the groups

As described above, there is no prior class to the workshop day. In order to manage the processes prior to, during and after the workshop day, the following tasks will have to be prepared/done by the teams:

Before the workshop:

Information material (posters/print-outs/flip charts for the information stand): At the workshop day the teams will present their results from the first part of the course. In order to do so, teams should prepare and bring print-outs, posters and flip charts. The goal is to inform the different groups of attendees best about the group work. We will have several square meters of room for each team. So,



teams can make use of that space in order to present their prior work and opportunity areas.

The following material is available for you at the Chair in Entrepreneurship and New Business Development (Hellenstrasse 9):

- Flip chart material and markers
- Colored and black/white print-outs (teams that want to print out A3/4 sheets in color can do that at the chair, please arrange beforehand)

Questions for different groups of attendees

One goal for the workshop day is to get some more information from the different groups of people attending the workshop day (e.g. managers, students, public). The teams need to prepare sets of questions relating to their work (i.e. opportunity areas), which they want to discuss and reflect with the attendees. Teams need to prepare questions for each specific group of people attending the workshop (i.e. several key questions for managers, other students and the general public).

Smaller teams might focus on specific groups and/or do less reflection/discussion with attendees.

At the workshop day, between 12-2pm:

Between 12-2pm on the workshop day (May 7) teams need to be at the Florinsmarkt (No 15) in Koblenz, in order to prepare their information stands. All team members need to be present in order to attach all their information material and get ready for the public part of the workshop day.

At the workshop day, between 2-5pm:

During this time, different groups of attendees (managers, students, general public) will see the work of the student teams.

Student teams will have the chance to ask the prepared questions and to get some more feedback from the attendees. The goal is to get some more information and opinions on the work of the groups (i.e. opportunity areas). Furthermore, student teams can investigate and discuss some concrete first development steps relating to the opportunity areas.

At the workshop day, between 5-7pm:

This is the round table discussion. Students just need to attend and collect further information for their work, based on the discussions on the stage.

VI. Differences regarding group size (workload)

As some of the students will have left for the management abroad courses, some groups will only consist of 2-3 students, whereas in some teams all members will remain.

Therefore, the assignment (final report) needs to allow for these differences. The only neutral measure to allow for such differences is the page number per group member.

For each group member, the required page number for the final report is 2-3 pages.

Sustainability Lab II, May 7, Florinsmarkt 15, Koblenz, 12 noon – 7pm



(e.g. groups with 2 people only will have to deliver a final report of 4-6 pages, while a group of 6 people will have to deliver a final report of 12-18 pages; both excluding the appendix and with 1,5 line spacing, 12 point letters)

While this is only a quantitative measure, the most likely difference for smaller teams will lie in the preparation for interviews for the workshop day and the description of the discussion and reflections with attendees (part 2 of the report, see above: *Part II: Results and reflections from the workshop day*)

VII. Responsibilities and individual components of grading

The second part of the Sustainability Lab is mainly a team effort.

Therefore the grade of the final report of the teams will reflect/equal the individual grades of the team members (i.e. in a team that scores a 1.3 as a final grade for the report, all individual team members will receive a 1.3).

Differences from that grade might come from these two exceptions:

- 1) Individuals who are not present during the core hours of the workshop day (12 noon to 7pm) might receive a lower grade as the attendance is required for the team work.
- 2) Teams that have difficulties with their team work (distribution of tasks, responsibilities, etc.) can refer to the chair and supervisor of the course in order to get individual components of the report graded for the individual contributors.

Syllabus Sustainability Lab, Spring Semester 2015

Instructors Christina Günther Christoph Hienerth Sascha Schmidt

Course Introduction

The sustainability lab is a format that deals with different topics of sustainability and future development. In this term we deal with sports and society and more specifically the innovation and sustainability of Olympic sports disciplines.

You will first get familiar with different concepts and frameworks linked to innovation, sustainability and the economics the sports industry and other sectors. Those concepts include topics such as 1) different types and degrees of innovation, 2) basic components and types of sustainability, 3) business models and sustainability, 4) industry evolution, 5) cluster emergence and development, 6) impact measurement.

Based on these concepts and frameworks you will work on your own case and develop an innovation for an Olympic sport, in order to make it more attractive for athletes, spectators, media, sponsors etc.. Your idea should provide sound and sustainable (financial) impact.

Teaching methods:

Lecture
E-modules
Self study
Guest speakers
Pitch and feedback
Video development and analysis

Course structure and content:

	Week 1: Introductory Session
Content:	Run of the course
	Organization
	Formats (exams, grading criteria, deliverables, e-modules)
	Case Introduction
	Real life illustration
Objective:	Understanding of the course format and procedure
	Introduction to main concepts of innovation and sustainability linked to
	the case
	Start of topic search for group work
To dos:	R e-modules
	Read literature (articles provided with e-modules)
	Brainstorm on topics

	Week 2: Case work
Content:	In depth understanding of course tasks and goals
	Illustrative case examples (guest speaker)
	Discussion of topic portfolio/choice
Objective:	In depth understanding of the case
	Finding group topics
	Applying main theoretical concepts to real life cases
To dos:	Start group work
	Prepare for exam (following week)
	Meet your team members (teams will be assigned based on personal
	preferences)

	Week 3: Exam (Multiple choice test based on e-modules)
To dos:	Prepare questions for Q&A session (following week)

	Week 4: Q&A sessions
Content:	Clarification of frequently asked questions related to group projects and
	to final deliverables
Objective:	Checkpoint for group work
	Refinement of group work
To dos:	Development of group work
	Prepare your pitch (following week)
	Develop story board for video (to be included in pitch)
	Develop outline for flyer (to be included in pitch)

	Week 5: Project pitch
Content:	Group idea pitch (5 minutes per team, plus 10 minutes for coaching and
	questions. Individual schedules will be announced)
	Feedback on group work
Objective:	Direction and fine tuning for group work
	Reassuring whether key concepts/goals and team work are aligned
To dos:	Include feedback in team work
	Finalize deliverables (2 minute video and flyer)

	Week 6: Final presentation
Content:	Evaluation of all team videos (peer review process)
	Selection of finalists
	Presentation by finalists (five teams)
	Award ceremony (up to 3 teams to be invited for the franz. finals in
	Düsseldorf)
Objective:	Gaining skills in evaluating projects
	Receiving feedback on group work
	Identification of finalists and winners

Grading components:

Group project (group, video plus story board, 60%)
You will hand in a two minute video and a flyer (to be submitted by February 15, end of day).

Multiple choice exam (individual, 30%)

In week 3 you will have a multiple choice exam that is based on the literature of the emodules.

Pitch (group, 5%)

For the pitch of your project in week 5, we will grade whether you are prepared and on track with your project.

Review task (individual, 5%)

In the last week of the project you will have to review all other group projects and assess their quality according to criteria which will be announced in class. Deadline for your assessment is February 16, end of day.

We will grade whether you have thoroughly fulfilled your task (evaluated all other projects reasonably).

Criteria will be:

- 1) Is the USP of team idea clearly spelled out, innovative and addressing relevant stakeholders' needs? What value is created?
- 2) What is the net business impact of your idea? Are there other, non-monetary benefits?
- 3) Is the idea feasible, e.g. to be realized within 5 years and sustainable? Are first approaches shown on how to implement the idea?

Literature:

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Message from the Dean



Globalization and fundamental changes in the economy require decision-makers in business and society to continuously update their knowledge and to develop the capabilities to master unprecedented challenges.

Moreover, globalization requires leaders to complement these professional skills with individual abilities and characteristics such as talent, creativity, moral integrity, and empathy. A business school, therefore, serves society by preparing the next generation of business leaders for the challenges of a globalized economy.

WHU has always been aware of this important societal mission. That's why a commitment to ethics and sustainability has been, from the very beginning, anchored and defined in the school's Mission Statement. This sense of purpose is also reflected in all core areas of activity and is exemplified on a daily basis. In recent years, however, topics such as global social and environmental responsibility, sustainability, ethics, and responsible leadership have been given even greater priority. To this end, the school has adopted concrete measures and dedicated additional resources to encourage corporate social responsibility throughout all its core activities. WHU has, as a result, made significant progress in recent years.

In mid-2013, WHU joined the Principles for Responsible Management Education (PRME) initiative to further integrate responsibility and ethics into the education and training of future managers. PRME provides WHU with a framework to implement a continuous process of improvement in all its areas. In response to the demand to better engage in management education communities and connect with businesses on a local level, WHU decided to place more focus on pursuing regional collaboration, and it signed and contributes to the relatively newly established PRME DACH Chapter. Even long before PRME, however, corporate responsibility and compliance activities were always an important aspect of the school's agenda. CSR-focused projects and activities are present in all areas of the organization (academic programs, research, executive education, and administration). WHU carries out these activities in close cooperation with wider society, prepares its students to assume responsibility in every sector of their lives, and supports lifelong learning. The motivation for these programs also comes from the inside-out: the WHU community, and especially the student body, is highly dedicated to society and community. This is a major pillar of the so-called "WHU spirit". WHU actively promotes entrepreneurial approaches and innovation and supports students in their intrinsic motives. In doing so, the school continues to live up to its claim of achieving "Excellence in Management Education": educating and training future leaders and inspiring them to strive for a meaningful life.

The following report describes the school's activities in the areas of teaching, research, executive education & corporate connections, community outreach, as well as organization and administration.

Yours

Professor Markus Rudolf Dean

le. pluy

WHU at a Glance

WHU – Otto Beisheim School of Management is a privately funded business school based in Vallendar/Koblenz and in Düsseldorf. It is a leading business school in Germany and is continuously ranked among the top business schools in Europe. WHU's academic degree programs and executive education programs provide excellent educational opportunities for every career stage.

WHU is a research-based institution specialized in the field of general management. It is characterized by its entrepreneurial spirit and strong people orientation. The three core areas of activity are Programs, Research, and Corporate Connections including Executive Education.

WHU offers a broad portfolio of degree programs consisting of the Bachelor of Science (BSc), Master in Management (MSc), Master in Finance (MSc), Full-Time MBA, Part-Time MBA, the Kellogg-WHU Executive MBA, and the Doctoral Program. WHU also offers open enrollment and customized Executive Education programs for individuals and companies.

WHU is a leading business school in Germany with a very strong international focus. The school's partner school network consists of 195 top business schools around the globe. WHU is well known for its outstanding corporate relationships and networks. These corporate relations can be described as strong, long lasting, and mutual.

Ethics, responsibility, and sustainability have always been an integral part of **WHU's mission** and values. The school pursues its mission of excellence in management education by "encouraging responsible leadership and teamwork" and by "contributing to the society

at large." WHU's vision for 2016 also reflects the importance of this topic: "In all aspects, WHU is truly international and highly committed to its social responsibility." All aspects of the school's activities reflect the energy and resources committed to this area.

In 2010, WHU introduced an institution-wide **Code of Conduct** that complements WHU's mission statement, vision, and claim of "Excellence in Management Education". The Code of Conduct articulates – in the form of a voluntary undertaking – a common standard of good conduct between members of the school and towards the outside as envisioned by the members of the school. The Code was developed by a team consisting of representatives from different WHU stakeholder groups and captures in writing a set of behaviors that jointly embody the "WHU Spirit" – a sense of respect, cooperation, responsibility, and initiative.

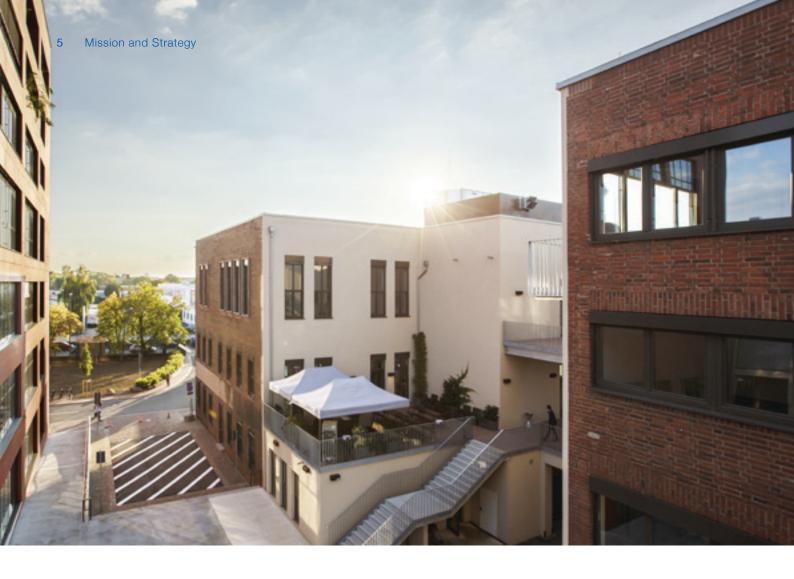
This spirit is born of mutual trust, support, and respect and is applicable to all members of WHU community. The Code is communicated and implemented in different ways. For example, new WHU members are introduced to the Code of Conduct in their live-in weeks and find their copy in their starter kits. Moreover, the Code of Conduct is displayed in every WHU building and is available during fairs and open days at WHU. In this way, WHU contributes to delivering the "WHU Spirit" to both the public as well as potential new WHU members.

In the past ten years, WHU has pursued a growth strategy and witnessed incredibly rapid and successful development. Nonetheless, the school has constantly assured that quantitative growth was accompanied by qualitative developments and professionalization. New developments, standards, and processes are constantly being adapted to ensure their sustainability. In the scope of several new projects, the school has further developed and emphasized the aspect of responsibility. The Dean's Office started an initiative to coordinate sustainability activities, to provide integrated reporting and communication (e.g. on its homepage, newsletter, etc.), and to make use of synergies across departments. Also, with the new Excellence Strategy (as of January 2015) WHU will continue this successful strategic path and pursue the school's course of Excellence in Management Education - while putting a special emphasis on sustainability.

The complex and multifaceted topic of "sustainability" is dealt with in specialized working groups for teaching, research, corporate connections, and administration. The goal of this approach is to assess the status quo and then to strengthen the structure and coordination of all sustainability-related activities at WHU. The groups will also focus on developing new objectives and initiating and implementing concrete measures to reach them.



Besides participating in the Principles for Responsible Management Education (PRME), WHU also pledged its participation in the "PRME Regional Chapter DACH" (encompassing the countries of Germany, Austria, and Switzerland). The chapter is a regional PRME network that assists with coordination and communication among participating universities and business schools in the German-speaking countries. The network offers members an important platform for mutual support, shared learning, and an exchange of experiences and concrete recommendations for action.



Mission and Strategy

WHU Mission Statement

WHU – Otto Beisheim School of Management is committed to "Excellence in Management Education" concerning academic programs, research, and corporate connections. Our commitment to excellent programs includes generating first-rate graduates and establishing a life-long learning environment. Our commitment to excellence in research aims at producing high-quality intellectual contributions to both academia and the business world. Regarding corporate connections, our commitment to excellence means that we maintain close ties with the business world and stay in intensive contact with a variety of partners in business and society.

We pursue our mission in particular by:

- combining academic rigor with practical relevance;
- attracting and developing high-quality researchers;
- creating a stimulating, intellectual, and international environment;
- fostering entrepreneurial thinking and acting;
- encouraging responsible leadership and teamwork;
- emphasizing the global dimension of business; and
- contributing to the society at large.

WHU Vision

"At the end of 2016, WHU is a respected player with agendasetting capabilities among the top European business schools. WHU is renowned for excellent academic programs in the field of general management, independent top-quality research, and an extensive network of corporate partners. In all aspects, WHU is truly international and highly committed to its social responsibility. Cultivating a close relationship with all stakeholders is a core value at WHU."

Programs

WHU's program portfolio includes a Bachelor in International Business Administration (BSc), a Master in Management (MSc) and a Master in Finance Program (MSc), a Full-Time MBA Program, a Part-Time MBA Program, and the Kellogg-WHU Executive MBA Program. In addition, WHU Executive Education offers customized programs for companies as well as open enrollment programs for individual participants (see chapter 6). WHU also offers a Doctoral Program as well as the possibility to pursue the German "Habilitation," i.e. a post-doctoral degree.

"WHU's goal is to create a mindset of responsibility for the economic, social, and environmental impact of managerial decisions. WHU aims to educate students who are striving to make a difference in the world."

Professor Jürgen Weigand

Associate Dean Programs and Academic Director MBA Programs, Institute for Industrial Organization

Certainly all of WHU's programs are designed to develop and foster personal growth, responsibility, and the personal abilities of its students – as well as preparing them for a managerial position in the business world. For this, ethics, responsibility, and sustainability have been (and are) continuously integrated in curriculum and program design, courses, and other learning vehicles. Topics range from the external effects and long-term consequences of economic decisions for firms and society, to the creation of novel business models with the goal of "shared value," i.e. value that benefits all partners in the economic process and society at large. Moreover, all WHU programs include semesters or modules abroad; this sharpens intercultural competence and raises awareness about global economic, environmental, and social issues.

An Honor Code (as well as the Code of Conduct) is an integral element of WHU's programs and enclosed with student's study contracts. This Code governs participants' conduct pertaining to all academic and extracurricular activities associated with the school.

Pre-Experience Programs



The School runs courses on sustainability in all pre-experience programs (BSc and MSc). The following list represents a small snapshot of mandatory courses related to business ethics, management and sustainability as well as personal development in the respective pre-experience program:

Bachelor of Science Program

- Business Ethics,
- Management Based on Ethical Values,
- Sustainability Lab,
- Social Entrepreneurship,
- Productions and Service Operations Management.

Master of Science Program

- Ethics in Management: Corporate Social Responsibility,
- Global Societal Challenges and Solutions,
- Sustainability Lab I & II,
- Sustainable Finance I & II,
- Responsible Leadership in Practice,
- Corporate Governance,
- Operations Strategy and Sustainability.

Post-Experience Programs

The Full-Time MBA, Part-Time MBA, and the Kellogg-WHU Executive MBA programs include several courses specifically designed to address sustainability and CSR. Ethical and responsible leadership is strongly emphasized in these programs, which are designed for professionals with work and management experience. In addition, WHU's MBA programs include an integrated module on personal development and personal growth.

This is supported by field trips and practical experiences; examples include visits to social organizations, such as a school for underprivileged children or hospitals, during international modules, as well as CSR-related business simulations (e.g. the Carbon Trade Simulation Game).

The following list provides an overview of sustainabilityrelated courses in the post-experience programs:

Full-Time MBA & Part-Time MBA Program

- Strategic Sourcing,
- Ethical Leadership in Practice,
- Ethics Sessions as part of the course Supply Chain Management,
- Responsible Leadership,
- Leadership Credo,
- Business Ethics.
- Operations Strategy and Sustainability,
- Personal Leadership.

Executive MBA Program

- Ethics and Executive Leadership,
- Corporate Social Responsibility.

General Studies Program



Another key vehicle for emphasizing ethics, sustainability, and social responsibility is WHU's General Studies program, which is supported financially by In Praxi, the school's alumni association. It features mandatory courses on business ethics, management and sustainability, and personal development. It also includes student participation in the National Model United Nations conference and an annual lecture series on "Management and Sustainability."

In addition, WHU's General Studies program provides an educational opportunity for the local community in the form of a semi-annual speaker series. In recent years, this forum has featured high-level politicians, business leaders, religious leaders, and social entrepreneurs.

Teaching Formats

WHU actively pursues the development of electronic modules and teaching videos for core topics in sustainability; a dedicated strategy group is working on exploring and developing opportunities for electronic teaching. Another example of an innovative, sustainability-related teaching method is WHU's Sustainability Lab. The idea behind this project is sustainability through cooperation and knowledge exchange in the fields of teaching, research, and practice. The lectures are supported by electronic tools (individual blogs and group wikis). Moreover, the course includes a number of different guest lectures in order to provide deeper insights and a greater variety of perspectives on sustainability. For this project Professor Christoph Hienerth was awarded a fellowship from the Stifterverband für die Deutsche Wissenschaft (a business community initiative focused on promoting





"The Sustainability Lab emphasizes the understanding of theoretical and practical aspects of sustainability and includes environmental, social, and economical issues. This way, students get to know the complete range of sustainable activities that companies can aim for and implement."

Professor Christoph HienerthChair in Entrepreneurship and New Business
Development

German scientific education and research). This fellowship, which is endowed with €50,000, is awarded for the development of innovative teaching formats and is proof of the teaching quality and innovative spirit at WHU in the area of sustainability.

Guest Lectures

Renowned leaders from business and society come to WHU on a regular basis to give WHU-wide guest lectures, addressing current issues of social responsibility in economy and society. The following list represents a small snapshot of guest speakers who gave a talk related to social responsibility and sustainability at WHU:

- Anselm Bilgiri Benedictine monk and Father,
- Dr. Norbert Röttgen Former Federal Minister of Environment in Germany,
- Prof. Schellnhuber Director of the Potsdam Institute for Climate Impact Research,
- Markus Dinslacken Head of Global Diversity and Inclusion at Henkel AG & Co. KGaA,
- August Ilg and Deborah Weiler Andheri Hilfe,
- Dr. Carsten Rübsaamen Bookbridge,
- Dr. Frank Mastiaux CEO of E.ON Climate & Renewables GmbH.
- Dr. Rainer Wend Head of Corporate Policy & Corporate Responsibility, German Post DHL,
- Inken Hollmann-Peters Head "Corporate Sustainability", Beiersdorf AG,
- Klaus Breil Member of German Bundestag, energy policy spokesman of the FDP fraction,
- Prof. Dr. Dr. Franz Radermacher Institute for Applied Knowledge Processing in Ulm and member of the Club of Rome,
- Rolf Schumann Project director of Better Place Europe,
- Sven Giegold Member of the Green party in the European Parliament and co-founder of Attac Germany,

Scholarships

There are numerous scholarships at WHU, mostly offered and administered by the respective program office. These include diversity-related scholarships for WHU's degree programs, including the WHU Diversity Scholarship and scholarships for women in business. The following list provides an overview of the major scholarships related to sustainability and diversity at WHU:

- Vodafone Chance Program (for BSc students with migrants background),
- The Votum-Foundation Scholarship (for orphans in the BSc and MSc programs),
- WHU In Praxi Diversity Scholarship (for international MSc students),
- WHU In Praxi Women in Business Scholarship (for female MSc students),
- WHU Globalization Scholarship (MBA students),
- WHU Diversity Scholarship (MBA students),
- WHU Leadership Scholarship (MBA students),
- WHU Scholarship for participants from developing countries (MBA students),
- WHU Entrepreneurship Scholarship (MBA students),
- WHU Scholarship for Women in Business (MBA students),
- DAAD WHU matching fund (for international MBA students),
- WHU Scholarship for excellent GMAT result (MBA students),
- Kellogg WHU Schumpeter Leadership Scholarship for NGOs.

Research and Faculty

"Excellence in research is one of the fundamental principles at WHU. This priority is not only emphasized in the school's mission statement, but also manifests itself in numerous top publications by WHU faculty. In this context, an increasing number of faculty members is involved in academic activities and different projects related to sustainability."

Professor Christian Andres

Director Research and Academic Director Doctoral Program, Chair of Empirical Corporate Finance

There are currently 51 chairs at WHU. Some of these focus their efforts and resources entirely on exploring subjects such as sustainability, responsibility, and ethics. However, the aspect of sustainability is addressed as an important aspect of management in all disciplines. The school hosts research centers (some of which are supported by corporate partners) and produces doctoral dissertations and other research publications that cover topics including, for example, sustainable supply chains, green logistics, accounting fraud and ethics, sustainable investment, measuring sustainability, and corporate social responsibility.

For the purpose of communication and mutual learning, all chairs must document their CSR-related activities in a dedicated chapter in their annual activity reports. Recently, WHU also invested in expanding its knowledge base regarding sustainability by adding a new digital collection to its library portfolio: the Greenleaf Online Library (GOL) by GSE Research/Greenleaf Publishing (a publisher of books and journals specialized on sustainability). This provides a solid base of literature to further enhance research activities in this field.

Dedicated Centers and Chairs

The Center for Responsible Leadership operates largely at the intersection of leadership, business ethics, and corporate social responsibility. The center is research-based as well as practice-oriented and serves as a platform for interaction between companies and scientists. Its aim is to provide a basis for teaching and knowledge creation in the field of leadership, business ethics, and entrepreneurship and to create awareness for social responsibility and personal development.

"Responsible leaders aim to serve all stakeholders' interests. In consequence, responsible leaders have the will to understand how their actions affect different stakeholders, they have the skill to deal with the ambiguity of contradictory stakeholder demands, and they fairly address different stakeholder demands over time."

> **Professor Miriam Müthel** Chair of Organizational Behavior

Starting in summer 2015, WHU will host an "Assistant Professor of Climate Adaptation Strategies" in cooperation with the Potsdam Institute for Climate Impact Research (PIK). The major goal is to investigate the impact of climate change on global infrastructures and supply chains and to further develop economic theories of adaptation to, and mitigation of, the effects of climate change. PIK is a member of the Leibniz Association and studies scientifically and socially relevant issues in the fields of global change, climate impact, and sustainable development.

Activities at WHU Chairs

The following list provides a selection of activities related to sustainability at WHU chairs:

- In line with current developments in the area of corporate finance, the **Chair of Corporate Finance** is conducting research in the field of psychology and the economics of prosocial behavior. As an example, the chair provided the final report of the Sustainability Index Workshop Project organized jointly by SU-CGFT and the UN Sustainable Stock Exchanges Initiative, which is also sponsored by the British Government.
- The Chair of Finance and Capital Markets is highly active in networks that promote research in the areas of sustainability and socially responsible investment (SAB trophy; PRI/FIR network).
- At the Chair of Empirical Corporate Finance, several research papers deal with questions of how organizational structures in corporations can ensure that the right incentives for managers to lead companies responsibly are in place, and how control structures should be shaped. These research projects address issues such as transparency, executive compensation, and board structures.
- The research projects in cooperation with financial institutions at the Chair of Empirical Capital Market Research focus on the standardization of transparency of financial products. Standardization improves investor protection and thus fosters the sustainability of investment decisions.
- The Allianz Endowed Chair of Finance initiated a number of research projects comprising regulatory measures targeted at the soundness and thus sustainability of the financial system – for example, a project comparing different proposals for restructuring banks in such a way that they can either fail or be saved without unbalancing the economic system.

- The Chair of Financial Accounting conducts research that aims to inform regulators on different aspects of sustainable development. For example, a project was initiated to inform regulators on the effects of fair value accounting and its attributes on sustainable financing and growth.
- Sustainability in taxation is discussed in all lectures of the Chair of Business Taxation. Moreover, the chair conducted a research project on how to obtain a sustainable and fair taxation in Sweden that had a direct influence on Swedish tax law.
- The Institute of Management Accounting and Control (IMC) examines how sustainability can be successfully implemented in management and, in particular, in the area of controlling. For example, the IMC has been contributing its expertise in the International Controlling Association's (ICV) expert work group on "Green Controlling." The ICV is the largest German association of controllers and acts as a platform for exchange within the German controlling community.
- Many of the courses taught at the Chair of Microeconomics and Industrial Organization II discuss sustainability considerations. For example, BSc course "Microeconomics II" devotes a chapter to external effects with a particular focus on environmental issues; in the MSc course "Strategic Competition" students analyze and discuss the long-term consequences of economic decisions for firms and society.
- At the Chair of Macroeconomics and International Economics as well as the Chair of Monetary Economics, courses in economics include discussions regarding the long-term effects of economic policy decisions, dimensions of sustainability, and reasons why policy decisions may be in conflict with sustainability requirements. A recent example is the development of a sustainability-adjusted competitiveness indicator for economic models.

- The Chair of Organizational Behavior conducted a research project called 'Sustainovation'. The aim of this project was to contribute to the implementation of strategic CSR standards in the area of new product development in order to foster shared value creation. Also, the chair is involved in a research project focused on lawmaking for sustainable corporate action.
- At the Chair of Corporate Strategy and Governance, sustainability is a core issue in all fields of activity. By definition, strategy deals with the long-term development of an institution, i.e. sustainable development. Thus, research at the chair looks at the longitudinal consequences of firm strategies - the sustainable outcomes.
- The Chair of Marketing Research conducts projects focused on, for example, the impact of corporate social responsibility on consumer behavior or on the drivers of short-term oriented versus sustainable performance evaluations of marketing and sales managers.
- The Chair in Logistics Management (Kühne-Foundation endowed Chair) focuses on the areas of sustainability and supply chain risk management. In the context of sustainability, the chair is developing and quantitatively assessing strategies for reducing greenhouse gas emissions. These research activities are conducted in cooperation with leading logistics service providers and industrial companies.
- At the **Chair of Production Management**, sustainability is one of the main research areas. Along with that, there are dedicated sustainability courses (e.g. Operations Strategy and Sustainability in the MBA Programs), and sustainability is embedded as a central topic in all operations management courses. Moreover, the Chair also conducts the annual industry competition "Die Beste Fabrik" – under the patronage of the Bundesverband der Deutschen Industrie (BDI) – jointly with the media partner Wirtschaftswoche and INSEAD, and awards the respective prize (www.beste-fabrik.de). Sustainable products, processes, and management practices are the major criteria in the competition.

- Teaching activities of the Kühne-Foundation Chair of Logistics and Services Management are designed to encourage resource-conscious behavior among students, who will become the resource-conscious managers of the future. Recently, the chair conducted a research project focused on internal collaborations and dealing with the organization of purchasing departments and the implementation of sustainable sourcing, which plays a major role in the implementation of a company-wide sustainability strategy.
- The Chair of International Business & Supply Management is contributing several articles in leading academic and professional journals as well as at conferences focused on the "how" of sustainability – for example, how environmental initiatives are implemented, how companies implement sustainability initiatives in distant environments, and how "green" the supply chains of green products really are. And much more.
- The Chair of Innovation and Organization has initiated a research program exclusively dedicated to cooperatives, rural development and sustainable growth in the renewable energy sector. The first research paper from this program has recently been published in a leading management journal. On the teaching front, an entire module is dedicated to "social venture capital and impact investment" in the Chair's Venture Capital course. The module exposes students to business models, investment processes, as well as strategies and financial instruments of venture capital firms that specialize in impact investment.

Publications

Ensuring high research quality and good scientific practices is extremely important at WHU. WHU is the only private business school in Germany that is a member of the German Research Foundation (DFG), and the school takes active measures to ensure that researchers at all levels comply with the principles of good scientific practice.

For that, WHU has established a **Commission to Ensure Good Scientific Practice** that clearly defines principles and rules of procedure for handling academic misconduct. The ombudsman is available to advise and support all members of WHU on matters of good scientific practice and any issues regarding the violation of these practices. He acts as a confidential advisor for those who report suspected scientific misconduct and takes action on allegations that are brought to his attention.

"Good scientific practice begins with the degree programs of our school. All efforts must be made to ensure that students not only receive an education based on scientific knowledge but are also made familiar with ethical principles and the standards of good scientific practice. At WHU, it is the responsibility of every lecturer to promote honest and responsible behaviour and to raise awareness of potential academic misconduct."

Professor Utz Schäffer, OmbudsmanInstitute of Management Accounting and Control

The following list illustrates a small selection of the latest publications by members of the WHU faculty related to sustainability, ethics, and responsibility:

 WALLENBURG, C. M.; SCHNEIDER, L. (2012): Implementing sustainable sourcing — Does purchasing need to change?
 Journal of Purchasing & Supply Management,



- Huchzermeier, A. (2014): Sustainability in operations. In: VAN MIEGHEM, J. A.: Operations strategy, Henry Stewart Talks, London,
- SCHNEIDER, L.; WALLENBURG, C. M.; FABEL, S. (2014): Implementing sustainability on a corporate and a functional level Key contingencies that influence the required coordination. International journal of physical distribution & logistics management,
- HAGIST, C. (2013): The method of generational accounting
 Measurement of intergenerational redistribution and fiscal sustainability. Wirtschaftswissenschaftliches Studium,
- HAGIST, C.; RAFFELHÜSCHEN, B. (2011): Fiscal and social sustainability under constraints of demographic development.
 In: KAHL, W.: Nachhaltige Finanzstrukturen im Bundesstaat, Mohr Siebeck, Tübingen

- Drake, D. F.; Spinler, S. (2013): Sustainable operations management – An enduring stream or a passing fancy? Manufacturing & service operations management,
- Kretschmer, A.; Spinler, S.; Wassenhove, L. N. V. (2014): A School Feeding Supply Chain Framework - Critical Factors for Sustainable Program Design. Production and operations management: an international journal of the Production and Operations Management Society,
- Kidwell, R. E.; Kellermanns, F. W.; Eddleston, K. A. (2012): Harmony, justice, confusion, and conflict in family firms - Implications for ethical climate and the "Fredo effect". Journal of business ethics
- WAGNER, T.; LUTZ, R. J.; WEITZ, B. A. (2010): Corporate Hypocrisy: Overcoming the Threat of Inconsistent Corporate Social Responsibility Perceptions. Journal of Marketing,
- JONES, D. T.; HUCHZERMEIER, A.; MITCHELL, A. (2010): Rebuilding trust and taking global responsibility. International commerce review,
- ARENDT, S.; Brettel, M. (2010): Understanding the influence of corporate social responsibility on corporate identity, image, and firm performance. Management decision,
- STICH, A.; WAGNER, T. (2012): Fooling Yourself: The Role of Internal Defense Mechanisms in Unsustainable Consumption Behavior. Advances in Consumer Research,
- MÜTHEL, M. (2013): Accepting global leadership responsibility - How leaders react to corporate social irresponsibility. Organizational Dynamics,

- EHRGOTT, M.; REIMANN, F.; KAUFMANN, L.; CARTER, C. R. (2011): Social sustainability in selecting emerging economy suppliers. Journal of business ethics,
- MÜTHEL, M; HÖGL, M.; PARBOTEEAH, K. P. (2011): National business ideology and employees' prosocial values. Journal of International Business Studies,
- THEISSEN, S.; SPINLER, S. (2014): Strategic analysis of manufacturer-supplier partnerships: An ANP model for collaborative CO2 reduction management. European Journal of Operational Research,
- Kleindorfer, P. R.; Neboian, A.; Roset, A.; Spinler, S. (2012): Fleet Renewal with Electric Vehicles at La Poste. Interfaces: an international journal of the Institute for Operations Research and the Management Sciences,
- Andres, C.; Van den Bongard, I.; Lehmann, M. (2013): Is Busy Really Busy? Board Governance Revisited. Journal of Business Finance & Accounting,
- ANDRES, C.; FERNAU, E.; THEISSEN, E. (2014): Should I stay or should I go? Former CEOs as monitors. Journal of corporate finance.
- Moreover, Professor Huchzermeier, Eva Kohl, and Professor Spinler recently contributed a chapter on "Supply Chain Management" to the book Teaching Ethics Across the Management Curriculum: A Handbook for Faculty. This book has been published by Business Expert Press as part of the United Nations PRME Book Collection, an initiative of the Center for Responsible Management Education (CRME). As this demonstrates, WHU faculty shares its knowledge and experiences on how to integrate ethics in management education with colleagues at other business schools.

Executive Education and Corporate Connections

WHU Executive Education offers customized programs for companies as well as several open enrollment programs for individual participants. Executive Education offers managers the opportunity to gain a broader horizon and a more multifaceted perspective on their daily business challenges as well as on the business world in general. With an emphasis on interdisciplinary teamwork, the Executive Education programs offer the ideal learning environment for developing, encountering, and implementing new business models while emphasizing awareness of social and ecological impact.

Customized Programs

Management development can support companies in responding to today's global challenges in order to sustain competitive advantages. WHU's customized programs are tailormade for companies that would like to train their executives and managers in general management or specific management topics. In customized programs, the explicit integration of sustainability issues into courses depends, of course, on the clients' needs. However, the lecturers do address general themes of ethics, responsibility, and sustainability in their courses.



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Open Enrollment Programs

In addition, WHU's Executive Education runs several **Open Enrollment Programs**. For example, the General Management Plus Program teaches general management skills with a focus on social entrepreneurship. The project features a unique cooperation with a social business called Bookbridge. This program includes an integrated "Business Impact Project" in which participants develop and execute a strategic plan for a social business in the context of an emerging country, including research, collaboration with local project partners, and planning a sustainable financial strategy.

One of the main project objectives is to develop a sustainable business model in an unfamiliar context. Participants collaborate closely with Asian partners, receive training and coaching in intercultural competence, and discuss matters of ethics and responsibility in an intercultural context. During the final stage of the project, the participants put their strategic plan into action on-site, under the guidance of Bookbridge.

"The joint project with the award-winning non-profit organization Bookbridge is specifically preparing talented managers for the future challenges of international projects. Working in cooperation with local partners, the managers open a learning center in a local village that creates learning opportunities for the inhabitants. The program's emphasis on social responsibility also helps to develop awareness about values and accountability and provides an opportunity to teach ethical behavior and to raise the question about the ultimate sense of what we are doing."

Dr. Rebecca WinkelmannManaging Director Executive Education

Community Outreach

Within the broader community, WHU assumes the role of a mediator and facilitator in the area of sustainability and provides a platform for exchanging insights and ideas. WHU is fortunate to have an exceptionally active and dedicated student body across all academic programs. A vast array of student clubs provide a venue for students to engage in community and volunteer activities that far exceed the requirements and restrictions of the curriculum.

Many of these clubs and their events focus on topics related to CSR and sustainability. Moreover, the school has initiated a Visiting Student Integration Program that is committed to fostering the wellbeing of exchange students at WHU. In addition, WHU faculty members regularly give presentations that are open to the public.

Student Clubs

WHU students dedicate an impressive amount of time and energy to volunteer work and to fostering relations with the local community, and this trend only seems to increase. Well-established initiatives and conferences continue to grow, while new projects and activities are constantly starting. Two annual conferences, SensAbility and 3 Day Startup (see below), focus on social entrepreneurship and promoting start-ups. In recent years, several of these initiatives have been recognized on a national level for their impact on the wider community. IdeaLab!, SensAbility and First Responder are three initiatives that were awarded Landmark status in the

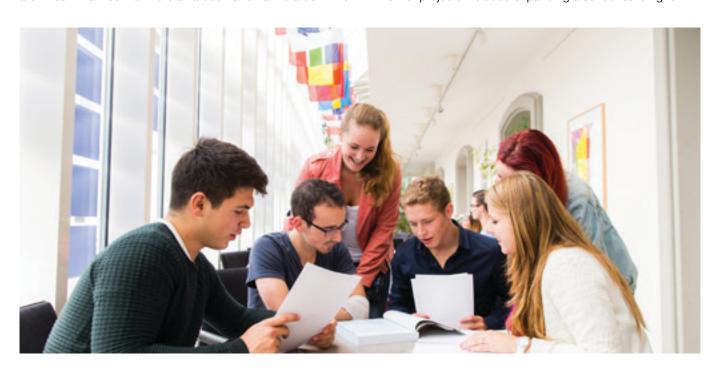
prestigious "Land of Ideas" competition. This prize is jointly awarded by the Federal Government and industry, organized under the patronage of the German President.

Other initiatives on campus are related to CSR; these include the Gender Balance Day conference, the "Campus for..." series with a focus on sustainability, "forum WHU – Responsible Business" congresses, WHU Euromasters, and the Philosophical Forum's ongoing public debate on "Management and Sustainability." The following list provides an overview of the different student organizations and conferences related to sustainability and social engagement:

WHU Studenten helfen e.V (WHUSH) [WHU Students help] is an entirely student-led organization to promote volunteer work among WHU students. This group aims to improve local communities and provide help to those who need it the most. WHUSH has different operational areas.

WHUSH has impacted the life of many children, women, and men around the globe through their **international projects** (e.g., students delivered used ambulances to a women's clinic in Afghanistan, and donated items such as books, school materials, kids' clothes, toys, beds, wheelchairs, and ultrasound equipment to a township in South Africa and hospitals in South America). To ensure maximum impact, the students partner with various corporations in valuable collaborations.

Other projects included expanding a school building for





small children in Nepal, constructing and equipping a bottle house in Namibia (in partnership with the Foundation "Steps for Children"), building a kindergarten in Tanzania, and renovating an N.A.C.A. orphanage in Cambodia.

Through its **local projects**, on the other hand, WHUSH has been able to help different institutions in the local community such as the Vallendar Kindergarten, an unemployment initiative, the Wasserburg house for youth and children, the Oskar-Hasenclever Foundation for youth and children, two elementary school associations, and the Lichtzeichen association for pregnant women.

Other examples of WHUSH's local engagement include:

- Merhaba is a program organized by the workers' welfare in Koblenz and WHUSH. WHU students help children with a migrant background with their homework three times a week. For many kids this is a rare opportunity to receive assistance with homework.
- The charity concert takes place twice a year in WHU's chapel and has become an integral part of WHUSH's fundraising efforts. These concerts are organized by students and are a shared cause of the Vallendar community and the WHU community to help local institutions.
- WHU BlutspendeTag is a blood donation campaign organized twice a year by WHUSH and WHU First Responders e.V. (see below) to encourage existing and new blood donors to donate on a regular basis.
- The pro bono **SAIDIA Consulting Agency** was created with the purpose of consulting non-profit organizations on a pro bono basis, as these organizations often lack the resources or know-how to initiate or complete certain projects.

- SensAbility the social enterprise conference is an annual conference that aims to raise awareness among WHU students on social issues and thus to inspire and motivate sustainable social action. Guest speakers from various fields share their experiences and knowledge. The topics vary from practical questions regarding social entrepreneurship, to the limitations of capitalism.
- WHU Walks for Charity draws together local residents, students, WHU members, and guests for a glamorous annual fashion show. The event combines trends in fashion with WHUSH's charity activities and creates a social event that benefits the community. The proceeds support various WHUSH projects.

Other examples of student initiatives related to sustainability are:

- The WHU "Campus for ..." series, a portfolio of annual conferences professionally organized by WHU students and/or faculty members, is probably the most visible sign of extra-curricular academic student activity. Several of the conferences address issues of sustainability and corporate social responsibility.
- WHU First Responder e.V. provides qualified emergency services before professional paramedics arrive at the scene. All members take an extensive four month medical emergency training course and are always ready use their specific knowledge and skills for the local community.
- Enactus, which is supported by executives from different scientific and economic institutions, is a community of students whose goal is to create a more ethical and ecological society through social entrepreneurial projects. The name "Enactus" is composed of the words Entrepreneurial, Action, and Us.
- forumWHU is an annual conference focused on the core topic of "economic responsibility." It provides opportunities for discussion and exchange among participants and guest speakers. Students from renowned European universities gather with decision-makers from business and politics to discuss current issues in the field of business, politics, and society.



Exchange with the Local Community

WHU maintains close relationships with the local communities in Vallendar and Düsseldorf; these are based on mutual exchange and support.

As an example, the project Integration@WHU organizes a variety of events that encourage interaction between Vallendar residents and foreign exchange students, thereby connecting the local and international communities.

The project was founded and supported by the German academic exchange service (DAAD) and the Federal Ministry of Education and Research (BMBF) as part of the program for the integration of international students (PROFIN) at WHU. Integration@WHU focuses on:

- attracting international students and facilitating their integration into the German educational system and WHU,
- offering cross-cultural trainings for faculty and staff,
- arranging on-site visits to international companies, and
- fostering close interaction with the town of Vallendar, the Schoenstatt Movement, and Vallendar University of Philosophy & Theology.

One integral part of the program is Integration@Vallendar, which offers a series of evening events in collaboration with key institutions in Vallendar. The events are planned by a working group consisting of members from the Vallendar University of Philosophy & Theology, the Schoenstatt Movement, the town of Vallendar, the German language teachers at WHU, WHU staff members, and student representatives.

As another example of community engagement, the Chair in Entrepreneurship and New Business Development provides voluntary job trainings for a local school community in Vallendar. At this training, WHU doctoral students and staff give instruction on how to successfully apply for jobs and help to prepare new graduates for upcoming job applications and interviews.

In addition, several WHU faculty members are active in the **Institute for Social & Sustainable Oikonomics (ISSO)**, a non-profit initiative of local universities and businesspeople. ISSO supports interdisciplinary research focused on the concept of a sustainable economy in close cooperation with universities in the Koblenz region and provides a platform to experiment with social and sustainable innovation.

In addition, WHU engages in regular exchanges with local politicians and committees. Some examples include:

- contact with the mayor,
- participation in the Vallendar round table,
- membership in "Wirtschaftsclub Düsseldorf",
- membership in the "Initiative for the future of Rhineland-Palatinate" - ZIRP,
- etc.

Administration and Organization

In keeping with the admonition to "practice what you preach," WHU actively pursues social and environmental sustainability on its campus.

Leadership

The social aspect of sustainability is implemented at WHU through a culture that emphasizes social responsibility, staff member diversity, and individual training and development. To meet the goal of the further development and internationalization of staff, WHU offers skills training for both faculty members and non-academic staff; these include topics such as intercultural competence, didactics and communication skills. A working group was established to develop a proposal for a new concept for staff development and training.

WHU's own internal operations and behavior are intended to serve as a model of ethical and social responsibility and to offer both students and faculty a stimulating learning and research environment. This includes flexible time models, the promotion of women in business and academia, the integration of staff members from different nationalities etc.

Campuses and Infrastructure

WHU meets the highest environmental standards with its recent infrastructural improvements to the WHU campuses in Vallendar and Düsseldorf, including carbon-free geothermal heating and innovative cooling systems via subterranean water/water supply wells. In addition, older facilities are constantly updated with new technologies to reduce energy consumption for lighting, heating, and air conditioning.

In terms of Information Technologies, WHU has installed a professional video conferencing system to reduce business travel between the two locations and related emissions. The implementation of a new campus management system also helps to optimize processes and use resources more efficiently.

WHU initiated a green campus project in order to identify further measures to "green" the campus and reduce resource consumption. WHU also completed the "EffCheck - PIUS Analysen in Rheinland-Pfalz" which identifies potential areas of economic and ecological optimization (in the fields of energy, water, materials, emissions, and waste). During the check, the Institute for Applied Material Flow Management (IfaS) carried out a series of inspections at the school that revealed that WHU, thanks to various measures, had been able to steadily reduce its energy and water consumption in recent years. At the same time IfaS suggested additional measures to increase the efficiency and sustainability of the school's infrastructure and operations.

This included, e.g., evaluating the possibility of using photovoltaic systems to generate electricity or reducing water use with waterless urinals. In conjunction with the expansion plans on the Vallendar campus, options for innovative energy sources will be examined in more detail. A number of the recommended measures have already been implemented; for example WHU has switched to 100 percent green electricity from renewable energy and replaced all fluorescent lights with LEDs.

"The EffCheck provided us with valuable insights about areas in which WHU could make an even stronger contribution to the sustainable use of natural resources. WHU is currently concentrating on those proposals for measures, developed in the course of the Check, that are focused on the local heating network. Because the school's buildings are located relatively close together, a local heating network is an attractive option. The buildings would be connected by a pipe network which enables the school to meet its own heat demand."

Peter Christ
Head of Administration

