



**Chaminade**  
**University**  
OF HONOLULU

## Course Syllabus

[Chaminade University Honolulu](http://www.chaminade.edu)

3140 Waialae Avenue - Honolulu, HI 96816

**Course Number:** STM 604

**Course Title:** Technology Transfer and Commercialization

**Department Name:** Management Science, Business Analytics, Computer Information Systems (CIS)

**College/School/Division Name:** School of Business and Communication, Chaminade University of Honolulu

**Term:** Accelerated Fall 2021 Semester (Oct 4<sup>th</sup> to December 13<sup>th</sup>, 2021)

**Course Credits:** 3

**Class Meeting Days:** TBD (Weekly; 10 Weeks)

**Class Meeting Hours:** 5:45PM to 9:50PM HST (in-class)

**Class Location:** Kieffer Hall #9 Classroom

**Instructor Name:** Eduard "Eddie" Merc, Ph.D., MBA (Please call me Eddie. ☺)

**Email:** [Eduard.Merc@chaminade.edu](mailto:Eduard.Merc@chaminade.edu) or [Eduardmerc@gmail.com](mailto:Eduardmerc@gmail.com)

**Phone:** (435) 200-4822 (Google Voice Number)

**Office Location:** Kieffer Hall, Room 23

**Office Hours:** MWF, 8:20AM-9:20AM; 11:45AM-12:45PM HST

**Instructor Website:** [www.chaminade.edu/faculty/EduardMerc](http://www.chaminade.edu/faculty/EduardMerc)

**Other Professional Contact Information:** eduardmerc (Skype) and @EdkoPletko (Twitter)



### CHAMINADE UNIVERSITY MISSION STATEMENT

Chaminade University offers its students an education in a collaborative learning environment that prepares them for life, service, and successful careers. Guided by its Catholic, Marianist and liberal arts educational traditions, Chaminade encourages the development of moral character, personal competencies, and a commitment to build a just and peaceful society. The university offers both the civic and church communities of the Pacific region its academic and intellectual resources in the pursuit of common aims.

### University Course Catalog Description

Catalog Description: STM604 Technology commercialization (3)

The process of technology commercialization ideation to tech transfer will be reviewed in stages and as a continuum. Processes and decision-making paradigms appropriate to each stage will be reviewed and students will have an opportunity to create a commercialization plan for successful technology implementation in a marketplace.

Offered every semester.

## Course Overview

Given a technology that works, how do you make money? In this course, we will survey the various options to commercialize a technology. These options apply to both technologies generated within large, established firms and by small entrepreneurs. We will address legal, financial, and marketing aspects of technology transfer and development. Students will identify and evaluate whether and how a technology has commercialization potential, translate the technologies into business applications, and propose plans for commercialization. Each class will revolve heavily around class discussion of the assigned readings and cases.

## Course Objectives

Upon successful completion of this course, students will be able to understand and apply the fundamental concepts, theories, principles, and practices employed in the commercialization of new technologies.

### Detailed Objectives:

1. Develop a strategic understanding of the commercialization process, the activities inherent in the process, and the related challenges and opportunities.
2. Develop critical thinking skills that will enable you to formulate, frame, and justify your solution to tech commercialization challenges.
3. Describe the discrete stages in the technology venture creation process and illustrate them by analyzing a case study.
4. Define the life cycle of a new technology venture from ideation, through development to launch, growth and exit.
5. Demonstrate the technology commercialization process for a specific project or venture.

## Program Learning Outcomes for the MBA track in Science and Technology Innovation

1. Understand the Science and Technology endeavor through frameworks of the domain sciences, desirable impacts on society and opportunities for business development;
2. Understand local, regional, and national S&T environments and the ecosystem of programs that seek to empower business in this sector;
3. Demonstrate the ability to use advanced data analytics and visualization to support all aspects of business development;
4. Identify each stage on the S&T continuum and design appropriate operational approaches to use cases derived from each of these stages, with particular focus on the process of technology commercialization.

## Course Learning Outcomes and Linkage to Program Learning Outcomes

Students who successfully complete this course will be able to:

Course Learning Outcomes	PLO 1	PLO 2	PLO 3	PLO 4
Develop a strategic understanding of the commercialization process, the activities inherent in the process, and the related challenges and opportunities.	X	X	X	X
Develop critical thinking skills that will enable you to formulate, frame, and justify your solution to technology commercialization challenges.	X	X	X	X
Describe the discrete stages in the technology venture creation process and illustrate them by analyzing a case study.	X	X		X

Define the life cycle of a new technology venture from ideation, through development to launch, growth and exit.		X	X	X
Demonstrate the technology commercialization process for a specific project or venture.	X	X	X	X

### Course Prerequisites

Please check Chaminade's Course Catalog for any pre-requisites for this class at: <https://catalog.chaminade.edu/>

### Alignment of Natural Sciences Courses with Marianist and Hawaiian values of the University.

The Natural Sciences Division provides an *integral, quality education*: sophisticated integrative course content taught by experienced, dedicated, and well-educated instructors.

- *We educate in family spirit* – every classroom is an *Ohana*, and you can expect to be respected yet challenged in an environment that is supportive, inclusively by instructors who take the time to personally get to know and care for you.
- *We educate for service, justice and peace*, since many of the most pressing global issues (climate change, health inequity, poverty, justice) are those which science and technology investigate, establish ethical parameters for, and offer solutions to.
- *We educate for adaptation and change*. In science and technology, the only constant is change. Data, techniques, technologies, questions, interpretations and ethical landscapes are constantly evolving, and we teach students to thrive on this dynamic uncertainty.

The study of science and technology can be formative, exploring human creativity and potential in the development of technologies and scientific solutions, the opportunity to engage in the stewardship of the natural world, and the opportunity to promote social justice. We provide opportunities to engage with the problems that face Hawai'i and the Pacific region through the Natural Sciences curriculum, in particular, those centered around severe challenges in health, poverty, environmental resilience, and erosion of traditional culture. The Marianist Educational Values relate to Native Hawaiian ideas of *mana*, *na'auao*, *ohana*, *aloha* and *aina*. We intend for our Natural Sciences programs to be culturally-sustaining, rooted in our Hawaiian place, and centered on core values of *Mai'au*, be neat, prepared, careful in all we do; *Makawalu*, demonstrate foresight and planning; *`Ai*, sustain mind and body; *Pa`a Na`au*, learn deeply.

### Methods of Delivery

This course will be delivered asynchronously via Canvas LMS system with weekly topics of content.

The course is designed to promote student participation through discussion of current business issues of technology commercialization as they relate to the management of a digital transformation and decision-making of new or untested business technologies in day-to-day operational processes.

One of the primary goals of this course is to help you develop the ability both to clarify your own position on a technology commercialization question and to be able to articulate and defend it clearly in our weekly discussion forums. Sharing your perceptions and ideas with others is crucial for learning and for understanding how the diverse opinions that you are likely to encounter in an organization are debated. You will find yourself presenting and testing new ideas that are not wholly formulated and assisting others in shaping their ideas as well. Lastly, you should be prepared to take some risks and be supportive of the efforts of others.

### Course Website:

Our course website in Canvas can be accessed by clicking this link:

<https://chaminade.instructure.com/courses/16936>

## Course Learning Materials & Resources

Course communication will take place through announcements in class, emails, and on Blackboard (blackboard.usc.edu). There is no textbook for the course. Harvard cases and notes can be purchased at a discount using the following link: <https://hbsp.harvard.edu/import/873794>. Other readings are provided free of charge in Canvas or can be accessed via Chaminade Library.

### Technical Assistance for Canvas Users:

- Search for help on specific topics or get tips in [Canvas Students](#)
- [Live chat with Canvas Support for students](#)
- Canvas Support Hotline for students: +1-833-209-6111
- Watch this [video to get you started](#)
- [Online tutorials](#): click on “Students” role to access tutorials
- Contact the Chaminade IT Helpdesk for technical issues: [helpdesk@chaminade.edu](mailto:helpdesk@chaminade.edu) or call (808) 735-4855

### Tutoring and Writing Services

Chaminade is proud to offer free, one-on-one tutoring and writing assistance to all students. Tutoring and writing help is available on campus at Kōkua ‘Ike: Center for Student Learning in a variety of subjects (including, but are not limited to: biology, chemistry, math, nursing, English, etc.) from trained Peer and Professional Tutors. Please check Kōkua ‘Ike’s website (<https://chaminade.edu/advising/kokua-ike/>) for the latest times, list of drop-in hours, and information on scheduling an appointment. Free online tutoring is also available via TutorMe. Tutor Me can be accessed 24/7 from your Canvas account. Simply click Account – Notifications – TutorMe. For more information, please contact Kōkua ‘Ike at [tutoring@chaminade.edu](mailto:tutoring@chaminade.edu) or 808-739-8305.

### Computer Proficiency Expectations

Students in this course are expected to be proficient in the following technology areas:

- Canvas LMS
- Chaminade email
- Microsoft Word (or other word processing software)

### Course Expectations

Your final grade will be based on your performance on professionalism, weekly assignments, discussion participation as well as a student’s critical thinking abilities throughout the semester.

- The average graduate student can expect to spend approximately 6-9 hours per week preparing for this class.
- Active student participation in all required discussions and weekly assignments is required.
- Honest communication with me personally or via e-mail is expected if any unexpected changes occur in your life.
  - Note: In case of any class updates, you will be notified via Canvas and your Chaminade email.

### Course Attendance Policy

Students are expected to log in to Canvas daily to check for course announcements, materials, and assignments.

## Behavioral Expectations

In our online classroom, civil discourse must be adhered to both in synchronous live meetings as well as asynchronous discussion rooms and/or interactions whether they are with the instructor or peers. Students should use proper netiquette at all times online.

Every student has the right to a respectful learning environment. In order to provide this right, students must take individual responsibility to conduct themselves in a mature and appropriate manner. I appreciate your serious approach to education.

## Assessment

All weekly homework in this course will be due at **18:00PM HST every** Sunday, at which point online submission boxes will promptly close.

Assessment methods include written assignments, class discussions and any additional class. Every effort will be made to return all student work within two-weeks of the due date.

Class assignments are divided into the following groups:

## Canvas Content and Homework

- Weekly study materials
- Weekly class discussions
- Analysis of 5 business cases
- Final Individual Project (“Commercialization Plan”)

## Grading and Assignments

Class sessions are designed to promote student participation through the discussion of important business theories of technology commercialization in the global business world.

Grading Distribution	Final Grade Requirements
<ol style="list-style-type: none"><li>1. Weekly Class Discussions = 300 points (10x30pts)</li><li>2. Final Project (Commercialization Plan) = 400 points</li><li>3. Three Business Cases Analyses/Reflections = 300 points (3x100pts)</li></ol>	A = 900 or more B = 800 to 899 C = 700 to 799 D = 600 to 699 F = Below 600

### 1. Weekly Class Discussions (10 @ 30 points each = 300 points) (PLO, 1, 2, 3)

Each student will post (via Canvas Discussion Forums) a 30-50 sentence summary of a topic set by the instructor as it relates to the world of technology commercialization. In your post, please be detailed and provide your own perspective or a point of view based on additional online research that you have done regarding the weekly class topic. Your discussion post must be submitted for each week by Sunday at 18:00PM HST in order to receive full credit for the assignment.

### 2. Final Project (“Commercialization Plan”) (400 points) (PLO, 1, 2, 3, and 4)

You will produce a commercialization plan for your chosen technology that you are interested in. Your plan should explain who should build/license the technology. Indicate whether there should be any exclusivity conditions, identify alternatives to your target firm, & identify any other partners (including for marketing & distribution). Your plan should also explain why this technology with this firm will succeed in the market. How will your plan create and

capture value? Estimate end-user Total Addressable Market, identify competitors & the competitive advantage, suggest a revenue model, & identify risks. 10 pages max (double-spaced, APA Format), excluding graphs/charts and cover/references page.

**3. Business Case Analyses/Reflections (3 @ 100 points each = 300 points) (PLO, 1, 2, 3)**

Each student will write their own analysis of a business case study related to technology commercialization topics in different industries. A word document must contain a 6 to 10-page double-spaced summary (APA Format) of student answers to specific questions of the business case.

**Schedule: (Oct 4th to December 13th, 2021)**

#	Content	Due Date
1.	Introduction, Class Discussions, Overview of tech commercialization	10/17/2021
2.	Class Discussions, Commercialization Strategies	10/24/2021
3.	Class Discussions, Business Case #1, Technology Transfer: Invention	10/31/2021
4.	Class Discussions, Technology Transfer: Application	11/7/2021
5.	Class Discussions, Business Case #2, Technology Adoption	11/14/2021
6.	Class Discussions, Technology Diffusion	11/21/2021
7.	Class Discussions, Disruptive Commercialization	11/28/2021
8.	Class Discussions, Business Case #3, Value Chain Analysis	12/5/2021
9.	Class Discussions (Draft Writing): Commercialization Plan	12/8/2021
10.	Course Wrap-Up, Class Discussions (Final Draft/Project Submission): Commercialization Plan	12/12/2021

**Suggestions for Success**

Manage your time wisely and stay organized! Learn how to use the required technology. Come to our online class prepared. Engage in the learning, discussions, and activities that take place in the classroom.

**General Grading Standards**

“A” students do not miss classes during the semester. They read and critically engage all the assigned readings before class on their own, and with classmates and the instructor. All assignments are not only complete but go beyond more than just the minimum requirements. Their assignments are turned in on time or early, exhibit proper style, grammar, and format, are well-organized, integrate strategic planning and targeting, and are written precisely and concisely. They

take advantage of all rewrite and extra credit opportunities. These students always keep up with current news events, both locally and globally.

“B” students miss a few classes during the semester. They usually read the assigned readings before class. Their assignments exhibit proper style, grammar, and format, are well-organized, integrate strategic planning and targeting, and are written precisely and concisely. They take advantage of all rewrite and extra credit opportunities. These students usually keep up with current events.

“C” students miss several classes during the semester. They complete the assigned readings before exams. Written assignments and exams usually exhibit proper style and formatting, but do not always integrate strategic planning and targeting, and are not always well organized or written precisely and concisely. All assignments are turned in on time, and most rewrite opportunities are used. These students sometimes keep up with current events.

“D” students miss four or more classes during the semester and skim assigned readings. Assignments and exams usually exhibit proper style and formatting, but they often lack integrated strategic planning and targeting, and are often not well-organized, or written precisely and concisely. Assignments are not always turned in on time and only some rewrite opportunities are used. They don’t keep up with current events.

“F” students fail to attend class consistently, miss exams, written assignments; don’t use rewrite opportunities.

### **Challenging a Grade on an Individual Assignment**

Should a student find at any point during the semester that they wish to challenge a grade they have received on an assignment, they are welcome to do so. Following are the grade challenging guidelines:

- Students must wait 48 hours after receipt of their assignment before challenging the grade
- Grade challenges must be submitted in writing via email, in respectful and professional prose
- Students must articulate, based on the merits of their work (not on circumstances) and the guidelines of the assignment/rubric, why they feel their grade should be amended
- Students have up to 2 weeks to challenge an assignment grade, attempts to challenge a grade after 2 weeks from receiving an assignment back will be automatically forfeited

Students also retain the right to academic grievance for final course grades through standard Chaminade processes should they feel this step is necessary.

### **Marianist Values**

This class represents one component of your education at Chaminade University of Honolulu. An education in the Marianist Tradition is marked by five principles and you should take every opportunity possible to reflect upon the role of these characteristics in your education and development:

1. Education for formation in faith
2. Provide an integral, quality education
3. Educate in family spirit
4. Educate for service, justice, and peace
5. Educate for adaptation and change

### **Native Hawaiian Values**

Education is an integral value in both Marianist and Native Hawaiian culture. Both recognize the transformative effect of a well-rounded, value-centered education on society, particularly in seeking justice for the marginalized, the forgotten, and the oppressed, always with an eye toward God (Ke Akua). This is reflected in the ‘Olelo No’eau (Hawaiian proverbs) and Marianist core beliefs:

1. Educate for Formation in Faith (Mana) E ola au i ke akua ('Ōlelo No'eau 364) May I live by God
2. Provide an Integral, Quality Education (Na'auao) Lawe i ka ma'alea a kū'ono'ono ('Ōlelo No'eau 1957) Acquire skill and make it deep
3. Educate in Family Spirit ('Ohana) 'Ike aku, 'ike mai, kōkua aku kōkua mai; pela iho la ka nohana 'ohana ('Ōlelo No'eau 1200) Recognize others, be recognized, help others, be helped; such is a family relationship
4. Educate for Service, Justice and Peace (Aloha) Ka lama kū o ka no'eau ('Ōlelo No'eau 1430) Education is the standing torch of wisdom
5. Educate for Adaptation and Change (Aina) 'A'ohe pau ka 'ike i ka hālau ho'okahi ('Ōlelo No'eau 203) All knowledge is not taught in the same school

## **Course Policies:**

### **Late Work Policy**

All weekly homework in this course will be due at **18:00PM HST every Sunday (end of each week)**, at which point online submission boxes will promptly close. Late work is NOT accepted in this course. Assignments which are not submitted on or before their due date will receive an automatic zero. If you find that you are having technical difficulties, please contact the Chaminade IT Helpdesk for issues related to Chaminade technology. If you have documentation from the Helpdesk indicating that they have identified a problem with the technology, I will allow you to submit the assignment once a resolution has been reached at no penalty to you. If students are unsure of their home technology, they should plan ahead to use the computer lab on-campus in order to submit work in a timely manner.

### **Grades of "Incomplete"**

Incomplete grades are reserved for cases of illnesses and other emergencies that cause a student to be unable to complete the course by the due date. In such cases, the instructor has the option of issuing an "incomplete" grade at the end of the semester. Requests for an "incomplete" must be accompanied by substantive documentation.

### **Writing Policy**

APA Style writing will be used in this class. For more information about this writing style, please visit: <https://apastyle.apa.org/>

### **Instructor and Student Communication**

Questions for this course can be emailed to the instructor at [Eduard.Merc@chaminade.edu](mailto:Eduard.Merc@chaminade.edu). Online, in-person and phone conferences can be arranged. Response time will take place up to 24 hours.

### **Cell phones, tablets, and laptops**

Out of consideration for your classmates, please set your cell phone to silent mode during class. Students are encouraged to bring laptops or tablets to class as the instructor will assign online activities and readings that will require the use of a laptop or tablet. Laptops and tablets should not be misused, such as checking distracting websites. Use your best judgment and respect your classmates and instructor.

### **Disability Access**

If you need individual accommodations to meet course outcomes because of a documented disability, please speak with me to discuss your needs as soon as possible so that we can ensure your full participation in class and fair assessment of your work. Students with special needs who meet criteria for the Americans with Disabilities Act (ADA) provisions must provide written documentation of the need for accommodations from Kōkua 'Ike:



Center for Student Learning by the end of week three of the class, in order for instructors to plan accordingly. If a student would like to determine if they meet the criteria for accommodations, they should contact the Kōkua 'Ike Coordinator at (808) 739-8305 for further information ([ada@chaminade.edu](mailto:ada@chaminade.edu)).

### **Title IX Compliance**

Chaminade University of Honolulu recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct, physical and/or psychological abuse will NOT be tolerated at CUH. If you have been the victim of sexual misconduct, physical and/or psychological abuse, we encourage you to report this matter promptly. As a faculty member, I am interested in promoting a safe and healthy environment, and should I learn of any sexual misconduct, physical and/or psychological abuse, I must report the matter to the Title IX Coordinator. If you or someone you know has been harassed or assaulted, you can find the appropriate resources by visiting Campus Ministry, the Dean of Students Office, the Counseling Center, or the Office for Compliance and Personnel Services.

### **Attendance Policy**

The following attendance policy is from the 2019-2020 Academic Catalog (p. 54-55). Faculty members should also check with their divisions for division-specific guidelines.

Students are expected to attend regularly all courses for which they are registered. Student should notify their instructors when illness or other extenuating circumstances prevents them from attending class and make arrangements to complete missed assignments. Notification may be done by emailing the instructor's Chaminade email address, calling the instructor's campus extension, or by leaving a message with the instructor's division office. It is the instructor's prerogative to modify deadlines of course requirements accordingly. Any student who stops attending a course without officially withdrawing may receive a failing grade.

Unexcused absences equivalent to more than a week of classes may lead to a grade reduction for the course. Any unexcused absence of two consecutive weeks or more may result in being withdrawn from the course by the instructor, although the instructor is not required to withdraw students in that scenario. Repeated absences put students at risk of failing grades.

Students with disabilities who have obtained accommodations from the Chaminade University of Honolulu Tutor Coordinator may be considered for an exception when the accommodation does not materially alter the attainment of the learning outcomes.

Federal regulations require continued attendance for continuing payment of financial aid. When illness or personal reasons necessitate continued absence, the student should communicate first with the instructor to review the options. Anyone who stops attending a course without official withdrawal may receive a failing grade or be withdrawn by the instructor at the instructor's discretion.

### **Academic Conduct Policy**

From the 2019-2020 Undergraduate Academic Catalog (p. 39):

Any community must have a set of rules and standards of conduct by which it operates. At Chaminade, these standards are outlined so as to reflect both the Catholic, Marianist values of the institution and to honor and respect students as responsible adults. All alleged violations of the community standards are handled through an established student conduct process, outlined in the Student Handbook, and operated within the guidelines set to honor both students' rights and campus values.

Students should conduct themselves in a manner that reflects the ideals of the University. This includes knowing and respecting the intent of rules, regulations, and/or policies presented in the Student Handbook, and realizing that students are subject to the University's jurisdiction from the time of their admission until their enrollment

has been formally terminated. Please refer to the Student Handbook for more details. A copy of the Student Handbook is available on the Chaminade website.

For further information, please refer to the Student Handbook: <https://chaminade.edu/wp-content/uploads/2019/08/NEW-STUDENT-HANDBOOK-19-20-Final-8.20.19.pdf>

### **Credit Hour Policy**

The unit of semester credit is defined as university-level credit that is awarded for the completion of coursework. One credit hour reflects the amount of work represented in the intended learning outcomes and verified by evidence of student achievement for those learning outcomes. Each credit hour earned at Chaminade University should result in 45 hours of engagement. This equates to one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester, 10-week term, or equivalent amount of work over a different amount of time. Direct instructor engagement and out-of-class work result in total student engagement time of 45 hours for one credit.

The minimum 45 hours of engagement per credit hour can be satisfied in fully online, internship, or other specialized courses through several means, including (a) regular online instruction or interaction with the faculty member and fellow students and (b) academic engagement through extensive reading, research, online discussion, online quizzes or exams; instruction, collaborative group work, internships, laboratory work, practicum, studio work, and preparation of papers, presentations, or other forms of assessment. This policy is in accordance with federal regulations and regional accrediting agencies.

**Aloha from Professor Eddie Merc, Ph.D., MBA/MSIS**

**Miscellaneous Student Notes:**