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| **Program:** | Graduate Program in Law, Institutions and Business (PPGDIN)  |
| **Course:** | Business, Sustainability and Technological Innovation I (Empresa, Sustentabilidade e Inovação Tecnológica I – ESIT I) – Level: Doctorate |
| **Schedule:** | Monday 6 PM – 9:00 PM |
| **Professor:** | Marcelo Amaral / Clarissa Brandão  |
| **Email:** | marceloamaral@id.uff.br |
| **Semester:** | 2019-2 |  **Workload:** | 45 h (3 credits) |

**Program Content**

Part I – Business (firms and innovation)

- Microeconomic aspects of firm: decision, function of production, offer x demand (Marshallian curves).

Part II – Technological Innovation

- Micro aspects of innovation (firm viewpoint): Business Strategy (concept of strategy; origin and evolution; Mintzberg’s 5Ps; Porter’s generic strategies), strategic planning, and competitiveness (SWOT matrix; 5-Forces; value-chain and competitive advantage);

- Macro aspects of innovation: globalization; innovation systems x productive system; Regional economic development; 3-4-5 Helix model;

- Economics of innovation: technology evolution and paradigms over 250 years; Schumpeter, innovation systems, measurement, sources of innovation, and competitiveness;

- Innovation mechanisms – incubators, TTO and science and technology parks.

Part III – Sustainability

- General concept; ecoinnovation; circular economy.

Part IV – Legal aspects of innovation:

- Intellectual and industrial property rights: TT contracts; search on patent databases; search on Periódicos Capes Database; brands and computer programs;

- Industrial property: valuation; internet, frauds and contracts;

- Brazilian Innovation Law and related legal framework.

**References**

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Manual Oslo

Manual Frascatti

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**Preliminary Schedule**

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| **Schedule** | **Business, Sustainability and Technological Innovation I** |
| 01 | August 12 | - Key aspects: knowledge, innovation, strategy, and project mngt (slides 3) - Course presentation – Syllabus, seminars, and final written work / students profiles |
| 02 | August 19 | Part I – Business (firms and innovation)- Microeconomic aspects of firm: decision, function of production, offer x demand (Marshallian curves) (slides 3 PGCF 8-62) |
| 03 | August 26 | Part II - Technological Innovation- Micro aspects of innovation (firm viewpoint): Business Strategy (concept of strategy; origin and evolution; Mintzberg’s 5Ps; Porter’s generic strategies), strategic planning  |
| 04 | September 02  | Part II - Technological Innovation- Competitiveness (SWOT matrix; 5-Forces; value-chain and competitive advantage) (Slides 5: 19-66; 71-78; 95-102) |
| 05 | September 09 | - Macro aspects of innovation: globalization (slides 5: 131-146; 5.1 optional) |
| 06 | September 16 | - Economics of innovation: technology evolution and paradigms over 250 years (slides Tigre 1-4) |
| 07 | September 23 | - Economics of innovation: Schumpeter, innovation systems, measurement, sources of innovation, and competitiveness (slides Tigre 5-6) |
| 08 | September 30 | - Economics of innovation: Schumpeter, innovation systems, measurement, sources of innovation, and competitiveness (slides Tigre 7-8) |
| 09 | October 7 | Macro aspects of innovation (innovation systems)- Innovation systems x productive system / Regional economic development / 3-4-5 Helix model (slides 8: 7-19; optional 20-40) |
|  | October 14 | No class (Professor’s Day on 15th) |
| 10 | October 21 | - Innovation mechanisms – incubators, TTO and science and technology parks (slides 8.1 and 8.2) |
|  | October 28 | No class (Civil Servant’s Day on 28th) |
| 11 | November 04 | Part III – Sustainability: General concept; ecoinnovation; circular economy |
| 12 | November 11 | Part IV – Legal aspects of innovation: intellectual and industrial property(slides 10: 1-11); TT contracts (slides 10: 58-64); search on patent databases (slides 10: 12-44); search on Periódicos Capes Database (46); brands and computer programs (slides 10.1, 10.2 optional) |
| 13 | November 18 | Industrial Property: valuation (slides 12: 1-32); internet, frauds and contracts (slides 12.1; slides 12.1, 3-7; slides 12.2, 5-13, 16-36; 38-46; slides 12.1, 25-32) |
| 14 | November 25 | Brazilian Innovation Law and related legal framework(slides 10: 65-82; slides 13; slides 13.1 optional) |
| 15 | December 02 | Seminar presentation and discussion / Delivery of final written work |

**Evaluation Criteria**

**1- Seminars**

General rules:

* The definition of groups/presentation orders will be discussed in the second meeting.
* The professor will match groups and content (each content has similar level of complexity).
* Each group/presenter will have 40 minutes to present the respective content. The overtime will affect the evaluation.
* Multimedia equipment is available in the classroom.
* It is not mandatory to print any document. However, the digital file with the synthesis or the MS Power Point presentation (or other electronic file) must be sent to the professor email until 12h before the presentation. The delay will affect the evaluation.
* The evaluation consists in four aspects: content comprehension and synthesis capacity (3,0 points); the individual presentation, correlation with themes and additional literature (4,0 points); the quality of the presentation slides and the submission deadline (2,0 points); the organization of the group/presenter (time, presence) (1,0 point). The penalties will be made in fractions of 0,25 point.

**2- Final Written Work**

The file must be sent to the professor by email until December 1st, 2019.

1. If working with innovation and related themes (science and technology policy; management of innovation environment; university): a research project proposal to the qualifying process including theme/object, objective, assumption/hypothesis, literature review, research design, and schedule.
2. If not working with innovation and related themes: Write a summary with a critical review of five documents (or five chapter of a book) from the complimentary literature or additional material approved (no longer than 20 pages with single space).
3. Develop an academic paper about innovation management and/or related themes (following rules from journals at Elsevier, Springer or Emerald) with at least 10 academic references. It can be a report of a professional experience.

Suggested themes (not limited):

- Author’s rights and new technologies – Blogs, Facebook, Second Live, P2P, etc

- Cybercrime

- Intellectual property of transgenic products and modified genetic organism (MGO)

- Software: free x proprietary

- The value of brands

- Creative commons

- Derivative works: plagiarism or art?

- Geographic’s indications and economic value-add

- Author’s rights: Brazilian and US legal frameworks

- Method and tools of technological forecasting

- Innovation and consumer change:

- Competitive intelligence: use of technological information to define market strategy

- Circular Economy

- University Business Collaboration (UBC) or University-Industry-Government-Society linkages

Each activity can receive a grade from 0 to 10

Final grade: (sPPGDINeminar + final work) / 2