**Georgia Institute of Technology**

**Wallace H. Coulter Department of Biomedical Engineering**

*New Course Syllabus*

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| Course Title: **Financial Planning for Projects** | Instructor: COM instructors - TBD |
| Course Number: **BMED 6504** | Credit Hours: 3 |
| Co-requisites: BMED 6501 |  |

**Course Description:** Financial planning, forecasting and budgeting for projects are essential requirements for successful development and commercialization of new products, product improvements and product line extensions. This course covers the basics of financial planning, analysis techniques and justification in order for engineering/development personnel to effectively collaborate with fundamental business components including: senior management, company financial management, and other entities.

**Catalogue Description:**

Project financial planning techniques including: costing, forecasting, time value of money, breakeven analysis, return on investment analysis, capital budgeting, risk and return, working capital management.

**Course Objectives:**

* Introduction to the management activities of strategic and product planning, control, and decision-making. Understanding of functions and departmental interdependencies within business organizations.
* Fundamentals of project/product financial strategy, forecasting and analysis methods for project and capital (production equipment) planning.

**Course Format:**

There will be two (2) class sessions of 1.5 hours each per week for the 16-week semester. Instructional mode of the course includes: Weekly lectures (1.5 hrs/week) and in-class exercises and discussions (1.5 hrs/week). Readings will be assigned in the designated materials, supplemented with reading from reference material and contemporary case information business. Grading will be from a combination of a mid-term and final exam, a written initial business plan and presentation for team-project.

**Grading:**

* Class assignments (20%)
* Exams on course material (30%)
* Business plan and presentation (30%)
* Class participation (20%)

**Class Materials:**

Required Books/Reference Materials:

* Author…

Recommended Reference Materials:

* Project Management**Course Topics, Topics and Presentations**

1. **Business Fundamentals and Commercialization Planning**
   1. Strategic Planning For Success
   2. Mission Statements and Strategic Goals
   3. Objectives, & Action Plans
   4. Department Planning and Budgeting
   5. Revenue/Sales Forecasting – macro and micro components
   6. Annual operating plans and budgets, cash flow projection
2. **Project/Product Financial Planning and Justifications**
   1. Project financial analysis and justification techniques
      1. Break-even analysis
      2. Return on investment (ROI)
      3. Discounted cash flow analysis
      4. Risk and reward analysis
      5. Make vs. buy decision analysis
   2. Product Costing and Bill of Materials
   3. Production requirements, Scale-up and Capital Investments
   4. Capital budgeting and planning
      1. Production molds and tooling
      2. Production and assembly equipment
      3. Economies of scale vs. investments
      4. Facility requirements and investments for medical products

*Attach here - Course General Guidance*