

# PROFESSIONAL DEVELOPMENT (PROF\_DEV)

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## **PROF\_DEV 515-0 Management for Scientists and Engineers (0 Unit)**

Successful researchers in engineering and the life and physical sciences face daily challenges managing and leading teams, communicating with business-oriented colleagues, and surmounting the hurdles associated with the commercialization of research. But doctoral students in these fields are seldom exposed to these situations before entering academia or industry. To address this gap, The Graduate School partners with Kellogg School of Management to offer a course taught by Kellogg faculty that will equip promising post-candidacy doctoral students with the necessary business and leadership skills.

## **PROF\_DEV 516-0 RCTP: Research Communication (0 Unit)**

Research communication and coaching researchers to improve their own presentation skills by building confidence in all communication roles, enhancing the clarity of the message, and forming a connection with any audience.

## **PROF\_DEV 518-0 Commercialization in Context (0 Unit)**

This course addresses why, when and how life scientists may secure and leverage the intangible knowledge produced by their research. Case studies involving challenges in big pharma (Lyrica, Naurex etc.) medical devices, health care software, agricultural plant breeding and other life science topics will be explored. The course begins with a survey of various intellectual property forms for inventions, original expressions, source identifiers/brands and confidential information etc. and how same can be used to build a unique selling proposition. Cost effective approaches for registering these intangibles as Intellectual Property (IP) are discussed. Methods for leveraging IP ownership to navigate the obstacles to commercialization will be reviewed.

## **PROF\_DEV 571-0 Pedagogical Foundations & Inclusive Learning (0 Unit)**

Understanding personal and existing pedagogical frameworks is a critical step towards the development of inclusive, learner-centered courses. Teacher-scholars in the 'Pedagogical Foundations and Inclusive Learning' course are invited to analyze and reflect on their commitment to teaching through in-depth discussions of topics such as pedagogical frameworks to support diverse learners, inclusive course design strategies, and personal teaching philosophies and practices.

## **PROF\_DEV 572-0 Course Design & Assessment (0 Unit)**

Developing course designs and facilitating learning environments in a transparent and equitable manner are practices that promote success for all students. Teacher-scholars in the 'Course Design & Assessment' course are invited to analyze and reflect on their commitment to teaching through in-depth discussions of topics such as learner-centered course design, equitable assessment methods, and designing grading rubrics. We define artifacts as evidence of the work that instructors do in preparation for and in reflection upon their work with students. By the end of the course, participants have developed and received feedback on their artifacts, which models the practice of "authentic assessment" involving complex tasks and real-world challenges (Wiggins, 2006). Not only will these artifacts demonstrate emerging understanding of approaches to teaching and learning, developing a sample assignment, for example, will be implementable in the future.

## **PROF\_DEV 573-0 Facilitating Learning & Scholarship of Teaching and Learning (SoTL) (0 Unit)**

Providing multiple ways for students to express what they know and undertaking systematic inquiry about student learning are two approaches towards reflectively creating an inclusive course. Teacher-

scholars in the 'Facilitating Learning & the Scholarship of Teaching and Learning (SoTL)' course are invited to analyze and reflect on their commitment to teaching through in-depth discussions of topics such as methods for facilitating student learning, equitable cooperative learning practices, and key characteristics of SoTL. We define artifacts as evidence of the work that instructors do in preparation for and in reflection upon their work with students. By the end of the course, participants have developed and received feedback on their artifacts, which models the practice of "authentic assessment" involving complex tasks and real-world challenges (Wiggins, 2006). Not only will these artifacts demonstrate emerging understanding of approaches to teaching and learning, developing a lesson plan, for example, will be implementable in the future.