Master of Science Biotechnology

Team Dynamics:
Developing Skills to be Effective Collaborators
2016-2017

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Course Description

The MS in Biotechnology Program (MBP) at Northwestern University is committed to preparing biologists, chemists and engineers for careers in the biotechnology and pharmaceutical industries. The interdisciplinary program provides comprehensive education in both biology and engineering. MBP strives to provide students with both the technical knowledge needed to succeed, as well as non-technical business competencies that professionals need to succeed in industry. Effective teamwork and team leadership is critical for graduates of MBP. The team dynamics component of your coursework is designed to introduce you to a variety of methods that will increase team performance. The functioning of teams and effects of group dynamics on performance and learning will be examined in depth.

The nine-month team dynamics program will run in conjunction with the following MBP courses: MBIOTECH 410: Technology Commercialization Fundamentals; MBIOTECH 420: Critical Thinking and Communication; and MBIOTECH 402: Bioprocess Engineering Laboratory.

Course instructors for the courses listed will explain how the team dynamics components will be factored into course grades.

Program objectives

The team dynamics program will focus on developing competencies in the areas of:

1. Managing the Team Lifecycle – formation, management and adjournment
   a. How should teams be designed to function most effectively?
   b. How can teams leverage diversity to maximize performance?
   c. How does understanding and sharing preferences increase team effectiveness?
   d. What are the key components of a valuable team charter?
   e. What norms and processes facilitate team performance?

2. Effective Team Communication
   a. What are the most common pitfalls to effective communication?
   b. How can listening skills be developed?
   c. How do communication styles impact conversation patterns?
   d. How can team members communicate feedback to each other most effectively?

3. Conflict resolution
   a. What types of conflict derail teams?
   b. What types of conflict can boost team performance?
   c. How can team members resolve disputes?
   d. How can team members leverage feedback to help mitigate team challenges?

In addition, throughout the workshops and coaching sessions strategies will be incorporated for teams to leverage self-awareness through Myers-Briggs Type Indicator (MBTI).
Requirements

- Myers-Briggs Type Indicator
  - Complete the Myers-Briggs Type Indicator, MBTI, Assessment, before workshop one 
    (Instructions sent before Orientation)

  - You will be provided with this book

- Conflict Dynamics Profile
  - You will be sent instructions for completing this assessment before workshop three (towards the end of the fall quarter)

- Team Charter (Fall and Spring quarters)
  - Your team will need to decide how it will approach assignments and work effectively together. It is important to create a charter that outlines the team’s goal, expectations about interactions and consequences for failing to adhere to the charter. Each team will develop a charter in the fall and spring quarters. Charters are due before your Fall and Spring coaching sessions. A sample charter and additional guidelines will be provided.

- Team Member Feedback Surveys (Winter quarter)
  - You will be sent a link to a survey that will need to be completed before many of the coaching sessions. You are expected to complete the survey by the assigned due date. The information that you provide in the surveys should be candid and will be used to shape the coaching session.

Optional recommended reading

Articles:
Books:


Course format

- The course will include a combination of workshops and team coaching sessions.
- Workshops will include exercises and activities that you are expected to participate in fully and actively.
- Team coaching sessions will be conducted with your assigned coach.

Course Expectations

1. Workshop attendance, active participation* and professionalism**
2. Completion of workshop assignments
3. Coaching session attendance, active participation, and professionalism
4. Completion of coaching assignments

*Active Participation:
Participation will generally be voluntary, but to ensure that everyone has an opportunity to contribute, the instructors may call on students. You are expected to show respect for others’ perspectives, make suggestions with the intent of helping, and always look for opportunities to learn collaboratively.

Quality comments possess one or more of the following properties:
- Offer a unique and relevant perspective
- Contribute to moving the discussion and analysis forward
- Transcend the “I feel” syndrome (e.g. include evidence, demonstrate recognition of basic concepts, and integrate these with reflective thinking)

Often a good question is just as valuable to the learning process as a good answer. Thus, asking incisive questions will also positively impact your participation. Similarly dominating the course discussion with comments will have an adverse effect.

**Professionalism:
You are expected to display professionalism and respect toward you fellow classmates and the instructors/coaches. Important aspects of professionalism include:
- Arriving to workshops/coaching on time, and returning from breaks on time
- Listening when your classmates are speaking
- Staying engaged
# Synopsis of Program Elements and Sequence

![Program Timeline](image)

<table>
<thead>
<tr>
<th>Theme</th>
<th>Getting to know yourself and your teammates</th>
<th>Planting roots and gaining momentum with your team</th>
<th>Leveraging feedback and finishing Strong</th>
<th>Applying learnings as you build a new team</th>
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<tbody>
<tr>
<td>Non-Classroom</td>
<td>Ice-Breaker – Flag Making</td>
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<tr>
<td>Workshop (2 hours)</td>
<td>(W1) MBTI Basics</td>
<td>(W3) Managing Team Conflict</td>
<td>(W4) Team Communication</td>
<td>(W5) – Forming a new team</td>
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<td>(W2) Teams 101 and Writing a Team Charter</td>
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<td>Team Coaching (1 hour per team. 8 teams in Fall &amp; Winter; 10 or teams in Spring)</td>
<td>(C1) Revising team charter</td>
<td>(C2) Team check-in; revising charter as needed; giving and receiving feedback with teammates</td>
<td>(C3) Applying what you have learned and building a strong (new) team</td>
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Objectives (What to expect from each workshop and coaching session):

Orientation and Fall

**Workshop 1:** Myers-Briggs Type Indicator (MBTI) - **Wednesday, September 14, 12:30-2:30pm**
- Understand four dichotomies of MBTI and your own preferences
- Discuss ways to leverage MBTI to work effectively with teammates

**Activity (team flag creation) – Thursday, September 15, 12:30-2:00pm**
- Get to know one another, see MBTI in action, and have fun!

**Workshop 2:** Teams 101 and Writing a Team Charter – **Thursday, September 15, 2:30-4:30pm**
- Understand ways to work effectively with others
- Build skills to discuss and write a team charter

**Coaching 1:** Leveraging your Team Charter – **This will be scheduled directly with your coach during week one, two, or three of the quarter**
- Review team charter
- Discuss how your team will effectively work together, including ways to balance different Types

**Workshop 3:** Managing Team Conflict – **To be scheduled**
Explore types of conflict
- Analyze conflict resolution strategies
- Build skills for resolving conflict using Conflict Dynamics Profile

Winter

**Workshop 4:** Team Communication – **To be scheduled**
- Build skills for effective communication with those who have similar and different work styles
- Understand how to give and receive feedback to peers

**Coaching 2:** Team check-in; revising charter as needed and giving and receiving feedback with teammates – **To be scheduled directly with your coach**
- Practice giving and receiving feedback
- Discuss any needed changes or additions to your team charter

Spring

**Workshop 5:** Forming a new team – **To be scheduled**
- Revisit team chartering as you form your new team
- Examine the concept team leadership and leading a team of peers
- Discuss lessons learned from your Fall/Winter team

**Coaching 3:** Applying what you have learned to build a strong (new) team – **To be scheduled directly with your coach**
- Discuss lessons learned and changes each will make on the new team
- Discuss team charter and how team will effectively work together, including ways to balance different Types
- Reflect on application of key takeaways about collaboration