**PhD – Individual Development Plan (IDP)**

**Chemistry Graduate Students**

**Student name:** (print) **Date**

**Advisor name:** (print)

**Directions for the student:** Complete the assessment and **discuss** it with your advisor. After completion, email the IPD form to the Chair of Graduate Studies with your advisor cc’d or submit a hard copy to the main office (a scanned copy will be emailed to you and your advisor). The electronic copy will be included in your file. Complete the IDP yearly using a new form.

Students are encouraged to refer to the [AAAS](https://myidp.sciencecareers.org/?AspxAutoDetectCookieSupport=1), [ACS](https://chemidp.acs.org/), and the [WVU career center](https://careerservices.wvu.edu/) for additional and more exhaustive resources for career path development.

# Skills Assessment

Rate your accomplishment in each area related to the [PLOs (Program Learning Outcomes)](https://www.chemistry.wvu.edu/students/graduate-students/phd-in-chemistry/graduate-forms/program-learning-outcomes) using the numerical scale where 1= deficient and 5 = highly proficient (highlight the number). Use the full range of scores. It is expected that you will be deficient in many areas – that is why you are seeking training.

**Scientific Knowledge** *PLO 1, 2, 3* Check if this a target skill for this year

Broad-based knowledge of science 1 2 3 4 5

Communicating science to a non-specialist audience 1 2 3 4 5

Technical knowledge related to my specific research area 1 2 3 4 5

Critical evaluation of scientific literature 1 2 3 4 5

Present a literature review of my research area 1 2 3 4 5

Write a literature review of my research area 1 2 3 4 5

**Independent Research Skills** *PLO 4, 5*

Experimental design 1 2 3 4 5

Performing experiments 1 2 3 4 5

Keeping a laboratory notebook 1 2 3 4 5

Research problem solving 1 2 3 4 5

Statistical analysis and interpretation of data 1 2 3 4 5

Math skills and experience with data sets 1 2 3 4 5

Initiative/independence 1 2 3 4 5

Critical analysis of data 1 2 3 4 5

Developing new research directions 1 2 3 4 5

**Communications** *PLO 6*

Organization of research proposal or publication 1 2 3 4 5

Writing with appropriate grammar and structure 1 2 3 4 5

Speaking clearly and precisely (no jargon) 1 2 3 4 5

Presenting research to different audiences 1 2 3 4 5

Seeking advice from advisors and mentors 1 2 3 4 5

**Professional Preparedness** *PLO 7*

Networking 1 2 3 4 5

Knowledge of career opportunities 1 2 3 4 5

Active and constructive communication with advisor 1 2 3 4 5

**Professionalism/Leadership** *PLO 8, 9*

Upholding commitments and deadlines 1 2 3 4 5

Organizational skills 1 2 3 4 5

Knowledge of safety 1 2 3 4 5

Safety conduct 1 2 3 4 5

Dealing with conflict 1 2 3 4 5

Lab citizenship 1 2 3 4 5

Work ethic 1 2 3 4 5

Leading and motivating others 1 2 3 4 5

Being able to give/receive constructive feedback 1 2 3 4 5

# Academics, Research, and Time Management

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| --- |
| What do you think will be the most challenging part of the upcoming year? |
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| Have you and your mentor reviewed expectations, and do you feel that you clearly understand what is expected of you as a PhD student in their laboratory? If not, what areas do you have questions about? |
|  |

# Specific Research skills

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| --- |
| Identify important skills necessary for success in your field of study and assess your level of mastery in each. |
| Skill 1:   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | 1 | 2 | 3 | 4 | 5 |  | | Beginner |  |  |  |  |  | Mastered |   Skill 2:   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | 1 | 2 | 3 | 4 | 5 |  | | Beginner |  |  |  |  |  | Mastered |   Skill 3:   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | 1 | 2 | 3 | 4 | 5 |  | | Beginner |  |  |  |  |  | Mastered | |
| In the next year, describe a plan to improve at least one of these skills |
|  |

# Professional Development *(optional)*

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| --- |
| What do you see as your long-term goals at this point in time, whether general or specific? |
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| What could help you achieve these goals? |
|  |

# Personal Development (optional)

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| --- |
| How are you feeling about your progress in the program? |
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| Is there anything else you would like to talk about with your advisor/mentor? |
|  |

**For the Advisor:**

During your meeting with the student, evaluate if the assessment and plans are realistic and work with the student to modify them if needed. Ask the following questions to review the effectiveness of your interactions with your trainee and add a checkmark to indicate that they were completed.

How often would you like to meet over the semester?

Establish the best times of the day to meet.

What other help do you need to help you achieve your goals for the coming year?

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| --- |
| Comments from the advisor regarding the discussion and priority goals: |
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