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				<u>Class Search</u>	1/Course Catalog.		
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Prefix	SOS	Number	232	Title —	Professional Skills in Sustainabi Practice	Units:	_3
Is this a	cross-lis	sted course?	No	If yes, ple	ease identify course(s)		
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A single requirer core are	course in nent and as simul	may be propose l more than one taneously, even	ed for more than a awareness area a if approved for	requiremer those areas	awareness area. A course may satisfy nts concurrently, but may not satisfy r . With departmental consent, an appr puirement and the major program of s	equirements in oved General St	two udies
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• Cultural Diversity in the United States courses (C) • Global Awareness courses (G) • Historical Awareness courses (H) A complete proposal should include: Signed course proposal cover form Criteria checklist for General Studies designation(s) being requested Course catalog description Sample syllabus for the course Copy of table of contents from the textbook and list of required readings/books It is respectfully requested that proposals are submitted electronically with all files compiled into one PDF. **Contact information:** caroling.harrison@ Caroline J. Harrison E-mail asu.edu Name Phone 5-8645



Department Chair/Director approval: (Required)

Chair/Director name (Typed):	Christopher G. Boone	. Date:	6/13/16
Chair/Director (Signature):	CR		

Arizona State University Criteria Checklist for

LITERACY AND CRITICAL INQUIRY - [L]

Rationale and Objectives

Literacy is here defined broadly as communicative competence—that is, competence in written and oral discourse. **Critical inquiry** involves the gathering, interpretation, and evaluation of evidence. Any field of university study may require unique critical skills that have little to do with language in the usual sense (words), but the analysis of written and spoken evidence pervades university study and everyday life. Thus, the General Studies requirements assume that all undergraduates should develop the ability to reason critically and communicate using the medium of language.

The requirement in Literacy and Critical Inquiry presumes, first, that training in literacy and critical inquiry must be sustained beyond traditional First Year English in order to create a habitual skill in every student; and, second, that the skill levels become more advanced, as well as more secure, as the student learns challenging subject matter. Thus, two courses beyond First Year English are required in order for students to meet the Literacy and Critical Inquiry requirement.

Most lower-level [L] courses are devoted primarily to the further development of critical skills in reading, writing, listening, speaking, or analysis of discourse. Upper-division [L] courses generally are courses in a particular discipline into which writing and critical thinking have been fully integrated as means of learning the content and, in most cases, demonstrating that it has been learned.

Notes:

- 1. ENG 101, 107 or ENG 105 must be prerequisites
- 2. Honors theses, XXX 493 meet [L] requirements
- 3. The list of criteria that must be satisfied for designation as a Literacy and Critical Inquiry [L] course is presented on the following page. This list will help you determine whether the current version of your course meets all of these requirements. If you decide to apply, please attach a current syllabus, or handouts, or other documentation that will provide sufficient information for the General Studies Council to make an informed decision regarding the status of your proposal.

Revised April 2014

Proposer: Please complete the following section and attach appropriate documentation.

ASU - [L] CRITERIA TO QUALIFY FOR [L] DESIGNATION, THE COURSE DESIGN MUST PLACE A MAJOR EMPHASIS ON COMPLETING CRITICAL DISCOURSE--AS EVIDENCED BY THE FOLLOWING CRITERIA: **Identify Documentation** YES NO Submitted **CRITERION 1:** At least 50 percent of the grade in the course should depend upon writing assignments (see Criterion 3). Group projects are Syllabus and attached acceptable only if each student gathers, interprets, and evaluates evidence, and narrative prepares a summary report. In-class essay exams may not be used for [L] designation. Please describe the assignments that are considered in the computation of course grades--and indicate the proportion of the final grade that is determined by each assignment. Also: Please circle, underline, or otherwise mark the information presented in the most recent course syllabus (or other material you have submitted) that verifies **this description** of the grading process--and label this information "C-1". C-1 **CRITERION 2:** The writing assignments should involve gathering. Syllabus and attached interpreting, and evaluating evidence. They should reflect critical inquiry, narrative extending beyond opinion and/or reflection. Please describe the way(s) in which this criterion is addressed in the course design. Also: Please circle, underline, or otherwise mark the information presented in the most recent course syllabus (or other material you have submitted) that verifies **this description** of the grading process--and label this information "C-2". C-2 **CRITERION 3:** The syllabus should include a minimum of two writing and/or speaking assignments that are substantial in depth, quality, and quantity. Substantial writing assignments entail sustained in-depth engagement with the material. Examples include research papers, reports, Syllabus and attached X articles, essays, or speeches that reflect critical inquiry and evaluation. narrative Assignments such as brief reaction papers, opinion pieces, reflections, discussion posts, and impromptu presentations are not considered substantial writing/speaking assignments. Please provide relatively detailed descriptions of two or more substantial writing or speaking tasks that are included in the course requirements Also: Please **circle**, **underline**, or **otherwise mark** the information presented in the most recent course syllabus (or other material you have submitted) that verifies **this description** of the grading process--and label this information **C-3**

	ASU - [L] CRITERIA								
YES	YES NO		Identify Documentation Submitted						
		CRITERION 4: These substantial writing or speaking assignments should be arranged so that the students will get timely feedback from the instructor on each assignment in time to help them do better on subsequent assignments. <i>Intervention at earlier stages in the writing process is especially welcomed.</i>	Syllabus and attached narrative						
	Please describe the sequence of course assignmentsand the nature of the feedback the current (or most recent) course instructor provides to help students do better on subsequent assignments								
2. Also	0:								
Please circle , underline , or otherwise mark the information presented in the most recent course syllabus (or other material you have submitted) that verifies this description of the grading processand label this information "C-4".									
C-4	C-4								

Course Prefix	Number	Title	General Studies Designation
SOS	232	Professional Skills in Sustainability	L

Explain in detail which student activities correspond to the specific designation criteria. Please use the following organizer to explain how the criteria are being met.

Criteria (from checksheet)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
Criteria 1	See Attached	See Attached
Criteria 2	See Attached	See Attached
Criteria 3	See Attached	See Attached
Criteria 4	See Attached	See Attached

Application for Literacy and Critical Inquiry [L] Designation

Responses to evaluation criteria in black font. Color coding highlighting below corresponds to color coding highlighting in additional documentation.

CRITERION 1: At least 50 percent of the grade in the course should depend upon writing assignments (see Criterion 3). Group projects are acceptable only if each student gathers, interprets, and evaluates evidence, and prepares a summary report. In-class essay exams may not be used for [L] designation.

Please describe the assignments that are considered in the computation of course grades--and indicate the proportion of the final grade that is determined by each assignment:

Students complete individual and group assignments in this course. For the group project, students are required to contribute their individual parts for each of the biweekly group assignments ("skill building team deliverable") as well as for the group's final report and presentation.

- Students' individual assignments include writing a reading reflection for each of the book chapters (7 reading reflections total). Second, students write a short report about their practice of professional skills, which they practice as part of their homework and which they evaluate using good practice guidelines. Third, each student prepares a written draft for each of the skill-building-team deliverables, which the group needs to produce together. The individual drafts inform the group's discussion, which aims at assessing and synthesizing group members' individual contributions. Every group member is tasked to write at least one of the group's final drafts of the bi-weekly skill-building team deliverables. Lastly, students create a written portfolio that demonstrates their mastery of professional skills by providing evidence of how they are able to apply tools and techniques to a concrete sustainability project and that describes their action plan for further learning professional skills in the future.
- Students' group assignments refer to the group project, which results in a written report. Every student gathers, interprets and evaluates evidence for the report and provides a written summary of this information to the team to inform the group's discussion and collective report writing. For instance, in last year's group project, every student had to research a number of "vision pool elements" for a sustainable community garden. Thereby, each student needed to research a number of vision pool elements and substantiate each element with evidence about its contribution to sustainability and feasibility.

Please provide detailed evidence of how the course meets the criteria:

Page 6 of the syllabus breaks down the types of assignments and their contribution to the overall grade (in percentages). The writing assignments constitute 73.5% of students' assignments. Thereby, individual writing assignments contribute 44.5% and individual writing assignments as part of the group project contribute 29%.

CRITERION 2: The writing assignments should **involve gathering, interpreting, and evaluating evidence**. They should reflect critical inquiry, extending beyond opinion and/or reflection.

Please describe the way(s) in which this criterion is addressed in the course design:

- Students' individual writing assignments entail critical inquiry. For instance, the reading reflection is designed on the basis of the "articulated learning reflection" model developed by Ash & Clayton (2004:137), which "pushes students beyond superficial interpretations of complex issues and facilitates academic mastery, personal growth, civic engagement, critical thinking, and the meaningful demonstration of learning." Additionally, creating the portfolio requires students to think critically about what evidence they present and how they present it in order to make the portfolio a demonstration of their skills. Interpreting the results of their baseline assessment, students develop their action plan for continuous learning.
- Students' contributions to the team project also entail gathering, interpreting
 and evaluating evidence because students are tasked to work on a real-world
 sustainability issue, which is brought to them by an actual project partner.
 Students' written and verbal report for addressing the real-world
 sustainability issue is scrutinized whether it meets both academic and
 scientific quality criteria (instructor's assessment) as well as professional
 quality criteria and valid promise of being effective and efficient (project
 partner's assessment).

Please provide detailed evidence of how the course meets the criteria:

- This course partners with a project partner in order to address a sustainability issue in the project partners 'line of business' (the project partner can be a municipal, educational, civil society, or business entity). This sustainability issue will be the project students' work on in their group. They are tasked to develop a well-researched and evidence-supported report how to address the issue. The written project report is assessed by the instructor; the preceding verbal presentation of the report is assessed by instructor and project partner. Page 6 shows how the report and presentation contribute to students final grade.
- Students' individual process of gathering, interpreting, and evaluating
 evidence is captured through the "weekly team-project meeting
 documentation", which needs to entail team member's individual
 contribution to the project work. It is also captured in the portfolio in the
 way they explain their skills and support their claims with evidence.

CRITERION 3: The syllabus should include a **minimum of two writing and/or speaking assignments** that are substantial in depth, quality, and quantity. Substantial writing assignments entail sustained in-depth engagement with the material. Examples include research papers, reports, articles, essays, or speeches that reflect critical inquiry and evaluation. Assignments such as brief reaction papers, opinion pieces, reflections, discussion posts, and impromptu presentations are not considered substantial writing/speaking assignments.

Please provide relatively detailed descriptions of two or more substantial writing or speaking tasks that are included in the course requirements

In-depth writing assignments:

- Students' individual in-depth writing assignment is the portfolio, which
 integrates all assignments, which the student has created, including the skillbuilding team-deliverables. However, these assignments are not just
 copy/pasted into the portfolio, instead they are presented as evidencesupported demonstrations of their skills and abilities, explaining how the
 skill was acquired, what purpose it serves, and what to consider when
 applying the skill in practice.
- Students' team-based in-depth writing assignment is the final report (as explained in criteria 1-2).

In-depth speaking assignments:

- Students in-depth speaking assignment pertains to the presentation of their final project to the project client, the instructor and fellow students. This speaking assignment is rehearsed through a "dry-run", which is a simulated "final presentation".
- Students also practice effective communication in their team meetings. Two team meetings involve in-depth speaking assignments in that students need to provide verbal feedback to each of their team members (related to team members' general performance in the team as well as to their ability to support learning in the team).

Please provide detailed evidence of how the course meets the criteria

• See page 6.

CRITERION 4: These substantial writing or speaking assignments should be arranged so that the students **will get timely feedback** from the instructor on each assignment in time to help them do better on subsequent assignments. Intervention at earlier stages in the writing process is especially welcomed.

Please describe the sequence of course assignments--and the nature of the feedback the current (or most recent) course instructor provides to help students **do better on subsequent assignments**

• Feedback is built into the schedule in several ways and throughout (see p.7). For instance, students bring their draft assignments to class. In class we discuss topics, tools, and techniques related to their assignment. This discussion will allow students to review their draft assignment and decide

- what changes they want to do. Students incorporate the improved version of their assignments into their portfolio.
- Students receive feedback on their portfolio mid-semester. Thereby, they receive feedback from the instructor as well as from two of their peers (peer-review). The final and revised portfolio is due at the end of the semester.
- Students receive feedback on their team project three times before they submit their final report and are expected to use this feedback to improve their report and presentation: (1) One third into the semester, teams present their idea of the proposal and how they plan to pursue it over the remaining weeks. (2) Two-thirds into the semester, teams do a "dry-run" presenting their proposal as it stands now. (3) Two weeks before the end of the semester students give their final presentation. The final report is due at the end of the semester.
- Students take a "Baseline Assessment" of professional skills towards the end of the semester. They use the results from this assessment to inform their plan of action for continuing to learn professional skills.

Please provide detailed evidence of how the course meets the criteria

• See page 7 with the overview of the course schedule



SOS 232: Professional Skills in Sustainability Practice

Fall 2017, session C; 3 credit hours

Office Hours Times: ...

Office Hours location: ...

Office Hours

Day/time/location

Prerequisites: SOS 110 / SOS 111; ENG 101, 107 or 105

Instructor Information

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Course description

This course introduces you to professional skills in sustainability, which will enhance your interpersonal competence. Interpersonal competence includes the ability to relate to people of various walks of life, to motivate and facilitate productive collaborations involving different social groups, and to be mindful about one's own actions as well as sensitive about cultural diversity. Interpersonal competence is one of the key sustainability competencies (Wiek et al., 2011). Just to recap, the other sustainability competencies include systems-, values-, future- and strategic thinking. Interpersonal competence is essential to succeed in applying any of the other sustainability competencies in professional settings: whether you intend to work in businesses, communities, government, NGO's, or going on to graduate school, interpersonal competence is critical for building successful collaborative partnerships.

In this class we will focus on six skill areas pertaining to interpersonal competence:

- Effective and compassionate communication
- Collaborative teamwork
- Responsive project management
- Impactful stakeholder engagement
- Caring self-management
- · Advanced continuous learning

Learning these professional skills of interpersonal competence happens through **practice**. Simply listening to a lecture about those skills will not do the job. You have to apply the skills, practice, and reflect how to improve them. To help you in this, the course combines three approaches:

- we will hold our class meetings as professional meetings to foster peer mentoring and learning;
- you will use the individual assignments to apply and rehearse your professional skills, and
- you will work on in a team on a *real-world project for a client*; thereby, you apply your professional skills and techniques from the beginning of the semester and throughout in order to ensure a productive and successful process.

Course Structure

The table 1 (page 7) shows how the course is structured into two-weeks blocks, one block for each of the professional skill areas. The course ends with reviewing and synthesizing what we have learned. The two-week-blocks covering one professional skills area are structured in similar ways. You will prepare for each session and revise your draft assignments with the help of the class sessions.

Each block is kicked-off through a discussion with a guest speaker. The guest speakers are professionals working as experts in communication, project management or as team coaches. They will share their experiences from years of practice. In preparation of our meetings with the guest speaker, you will read the book chapter, draft a reading reflection, and be prepared to discuss your insights with everyone.

After this kick-off discussion, you revise and finalize your reading reflection with your take-away from this discussion.

Following the discussion with the guest speaker are three *practice sessions* where we practice the skills discussed in the book chapter as well as those presented by the guest speaker. In the *first practice session*, we work on the good practice guidelines of the book chapter and discuss questions related to your personal professional practice. In preparation of this first practice session, you will bring a draft of your individual assignment of your personal professional practice and use the opportunity to review and revise your assignment in light of our discussion.

In the *second practice session*, we focus on the team project and discuss your experience from applying the professional tools and techniques to your team project. In preparation of this second practice session, your team will bring the draft of the team's skill-building deliverable and use the opportunity to review and revise the team's skill-building deliverable in light of our discussion.

The *third practice session* is dedicated to working on those practices that emerged as challenges for teams and students during the preceding weeks. We will use the third session to clarify questions and wrap up the discussion of the professional skill area of this block. As some of these sessions will be feedback-sessions, you are required to carefully review your peers' work and provide constructive feedback on your peers' performance.

In the class sessions we discuss the professional skills, thereby we use the team project as the hands-on experience to apply the skills and reflect on how well this works. Therefore, students will work on the team-project throughout the semester and in parallel to the sessions. The course does not structure your work on the project: you will use your skills related to self-directed learning, project management and teamwork to develop a plan and milestones, identify and distribute the work, and work on the sustainability issue at hand etc. You will engage in weekly team meetings in order to *organize your project* and to *actually work together* on the content of your project.

Course Goals

This course pursues four goals:

- To introduce you into the spectrum of professional skills, focusing on select tools and techniques
 pertinent to the six professional skill areas (Effective and compassionate communication;
 Collaborative teamwork; Responsive project management; Impactful stakeholder engagement;
 Caring self-management; Advanced continuous learning)
- To give you *hands-on experiences* with applying basic tools and techniques pertaining to each professional skill area to your team project and your own professional practice
- To develop arguments why these skills matter for sustainability professionals
- To critically and constructively reflect on our individual level of mastery related to each skill area and devise ways how to improve our own professional skill practice

Learning Outcomes

As a result of taking this class you should be able to *demonstrate*, through reflective writing and through your actions in the classroom and in team settings, your capabilities in the six skill areas: Effective and compassionate communication; Collaborative teamwork; Responsive project-management; Impactful stakeholder engagement; Caring self-management; Advanced continuous learning. Specifically, in each of the six skill areas, you will be able:

- To explain why each of the six professional skill areas is important for sustainability professionals; you will explain this through your reading reflection and portfolio.
- To explain the qualifier for each professional skill area (e.g., why is *responsive* project management important for sustainability professionals?); you will explain this through your reading reflection and portfolio.
- To define your learning strategy for learning and rehearsing the professional skills, techniques and tools. You will define your learning strategy in your recurrent professional practice activity and your end of semester action plan.
- To apply your learning strategy to your own professional practice and to your team project, which will be evaluated through peer-and self-assessment activities.
- To critically reflect, individually and with your team, on your level of mastery and provide constructive feedback how each team member can improve their professional skill practice. You will engage in critical reflection in the reflective team meeting and other class activities.

Course Textbook, Materials and Fieldtrip

There is a textbook, which has been specifically developed for this course: "Professional Skills in Sustainability". The textbook will be made available to students on the first day of classes. Additional articles, book chapters, and videos are available on the course website, or through the online reserve service from ASU Libraries. The course content, including lectures, are copyrighted material and students may not sell notes taken during the conduct of the course (see ACD 304-06, "Commercial Note Taking Services" for more information).

As part of the course, you will go on a fieldtrip to observe impactful stakeholder engagement in action. This fieldtrip takes you to public meetings hosted by municipalities, non-profit organizations, neighborhood associations, or businesses. These public meetings are concerned with a decision-making challenges, which requires participation of stakeholders in order to resolve it. A list of events that are suitable for this fieldtrip will be provided as well as a process to help students find at least one partner to go on the fieldtrip as pairs (or larger groups). If you cannot attend the fieldtrip, you will work with the instructor to find an equivalent alternative (e.g., watching a documentary about sustainability problem solving that involves stakeholder engagement).

Assignments

It is your responsibility as a young professional to keep up with all the lectures, readings, activities, and discussions for each session that will be used to assess your progress throughout the course. You will be assessed on your performance in two main areas: the area of your individual performance and your team-performance.

Assignments pertaining to your *individual performance* relate to the course sessions and are designed to help you spend the time in class and in the team meetings in the most effective way. Therefore, all assignments are done in preparation of course sessions and team meetings. Always bring a printed copy to class and to the team meeting. You will use the class sessions to individually review your assignment and incorporate an improved draft into your portfolio. The portfolio is the collection of your revised individual and team-assignments. It thereby presents your mastery of tools and techniques across all of the professional skill areas discussed in this course. Additionally, your portfolio will also include a section that looks into the future. This section describes an action plan for continuous learning of your professional skills. The action plan determines the tools and techniques, which you wish to expand upon and describes your learning strategies to learn and practice them. To develop your action plan, you will take a Baseline Assessment of Professional Skills and use the results to determine your learning goals¹.

You demonstrate your *team performance* through your work on the team project in two ways. First, you will work in a team on a real-world project and deliver a product to a client. The product for the client entails a presentation and a report. Second, you will apply the tools and techniques covered in class to your team project in order to make the team process productive, smooth and professional. You demonstrate this application of tools and techniques through developing the "skill-building team-deliverables", one for each of the six professional skill areas. Lastly, in order to succeed with your team project and the skill-building team-deliverables, your team must meet once a week and submit a complete meeting documentation of each weekly team meeting.

The assignments will be described in more detail in separate documents. *All assignments are due through Blackboard. Late assignments will not be accepted and count as zero points. All written assignments must be proofed for typos and grammatical errors.* Students must demonstrate correct usage of formal English in sentence construction, considering mechanics, organization, and content.

Class Attendance

General: Attendance is required for all face-to-face classroom sessions. Coming in late or leaving early can be disruptive and it means you will miss key information. If you have a documented reason for your absence (family/health emergency, etc.) it is your responsibility to discuss it with the instructor as far in advance as possible. Students will lose 5% of their entire grade if they miss a class, arrive more than 5 minutes late, or leave early, with no approved excuse.

Excused absences related to university-sanctioned events and activities: Students who participate in university-sanctioned activities that require classes to be missed will be given opportunities to make up examinations and other graded in-class work. However, absence from class or examinations due to university-sanctioned activities does not relieve students from responsibility for any part of the course work required during the period of the absence. The provost of the university or designee shall determine, for the purposes of this policy, whether a particular event qualifies as a university-sanctioned activity.

¹ The Baseline Assessment of Professional Skills (BAoPS) is a non-graded assessment. It serves as self-assessment to determine the level of mastery of skills, what skills and tools should be developed further in the future and how.

Excused absences related to religious observances/practices: A calendar of religious holidays is posted at https://eoss.asu.edu/cora/holidays. Students should notify faculty at the beginning of the semester about the need to be absent from class due to religious observances.

Course Participation

Students will be graded on their overall participation in the course. Participation means that students e.g., raise questions, present discussion points, and respond to their peers' contributions. Please contribute to our classroom discussions in a way that is respectful to your instructor and your peers. As this course is introductory in nature, it should be a safe space for discussing habits and skills that make for a successful sustainability professional. It is critical that everyone feels comfortable in our classroom. And, ultimately, the course should be an enjoyable experience in which we can have fun while learning.

Classroom behavior

Students are expected to not interfere with the learning experience of others. Therefore, make sure cell phones are off, do not surf the web on anything unrelated to class during class time, listen attentively, and be respectful to the needs and priorities of other students. Research showed that even seeing the smart phone within your peripheral vision distracts attention and ability to focus on the conversation (Turkle, 2015; Lepp et al. 2015)². If you have an emergency and need to keep in communication with someone, inform your instructor ahead of time. While laptops are not required for this course, you may use your laptop to take notes. We recommend taking notes by hand as research indicates that taking hand written notes supports retention of information as well as the ability to integrate and synthesis this information (Mueller & Oppenheimer, 2014)³.

Missed assignments

In the special circumstances that an assignment was missed, students must provide an explanation why the assignment was missed, request an appointment with the instructor, and meet in person with the instructor and discuss alternatives.

Syllabus Disclaimer

The instructor views the course syllabus as a formal agreement between the instructor and students. Every effort will be made to avoid changing the course schedule, but the possibility exists that unforeseen events will make syllabus changes necessary. The instructor reserves the right to make changes to the syllabus as deemed necessary. Students will be notified in a timely manner of any syllabus changes face-to-face, via email and/or in the course site Announcements. It is your responsibility to check your ASU email and the course Blackboard site announcements often.

² Lepp, A., Barkley, J. E., & Karpinski, A. C. (2015). The Relationship Between Cell Phone Use and Academic Performance in a Sample of U.S. College Students. SAGE Open, 5(1), 1–9. Turkle, S. (2015) Reclaiming Conversation: The Power of Talk in a Digital Age, Penguin Press.

³ Mueller, P.A. & D. M. Oppenheimer (2014) The Pen Is Mightier Than the Keyboard Advantages of Longhand Over Laptop Note Taking. *Psychological Science* June 2014 vol. 25 no. 6 1159-1168.

Course Grading

Weekly team-project meeting documentation includes (10pts per package, 14 total)	14%
1. Agenda for meeting (related to work on team project & skill-building deliverable) (2 pts)	140pts
2. Team members individual drafts of skill-deliverable (2pts)	
3. Team members individual contribution to project work (2pts)	
4. Meeting minutes (attendance, roles, decisions, action items) (2pts)	
5. Reflection on this week's team process and use of tools (2pts)	
Students rotate the lead of team meeting. Every student leads at least 2 team meetings. The student	
leading the meeting brings the draft of the skill-building team deliverable to class.	
reduing the meeting brings the draft of the skill ballating team deliverable to class.	
Skill-building team deliverables, describing the application of tools in the team, include (200pts):	20%
Team building activity (30pts)	200pts
2. Team plan for <i>caring-self management</i> (30pts)	200013
3. Reflection on <i>learning strategies</i> of team members and how to learn together (30pts)	
4. Team Contract (RPM), incl. Code of Collaboration, work plan, timeline, roles (30pts)	
5. Fieldtrip to observe <i>stakeholder engagement</i> in action and apply to own activity (40pts)	
6. Written and verbal peer <i>feedback</i> on performance and self-management (40pts)	
Each team-mate brings their written draft of these skill-building team deliverables to each meeting.	
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Team-Project deliverables include (150pts)	5%
1. Dry Run (50pts)	5%
2. Presentation (50pts)	5%
3. Report, including evidence of individual contributions (50pts)	150pts
Individual assignments to prepare for the class sessions include: (270pts)	27%
	270pts
	270013
2. Written report of your professional practice for each skill block (70pts)	
3. Individual written draft of the skill-building team deliverable for each skill block (60pts)	
Bring a printed copy of each of these three assignments to class for your review and revisions.	
Individual portfolio package includes: (90pts)	9%
1. Portfolio (60pts)	90pts
2. Baseline assessment of your level of mastery of professional skills (15pts)	
3. Action plan for continuous learning of your professional skills (15pts)	
Individual course attendance & participation	
Individual course attendance & participation	4.50/
Attendance (see attendance policy above)	15%
2. Participation: class discussion, interaction with guest speakers (150pts)	150pts
Total of 1,000 points.	4000/
Total of 1,000 points:	100%

The letter grade will correspond with the following percentages achieved. All course requirements must be completed before a grade is assigned.

Α-	89.5-92.4	Α	92.5-97.4	A+	97.5-100	Excellent	
B-	79.5-82.4	В	82.5-87.4	B+	87.5-89.4	Good	
С	69.5-77.4	C+	77.5-79.4			Average	
D	59.5-69.4					Passing	
E	< 60 Failure					Failure	
XE	Failure due to Academic Dishonesty						

Weekly Schedule for C-Session (15 weeks)

w	Session title	Session activity	Assignments for students	
1	Introduction to Professional Skills in Sustainability		RRDP Introduction	
1	Intro to the Team Project		Project Description	
2	Caring Self-Management (CSM)	Guest speaker engages students in discussion and skill-building activities	Bring print out of your RRDP CSM Chapter to class	
2	Caring Self-Management —Skill Practice	Student-led reflection & discussion about insights from chapter, lecture	Bring individual draft of CSM team-deliverable to class	
3	Team Project Discussion	Student-led discussion of skills & tools applied to the team project	Bring team draft of CSM team-deliverable to class	
3	Joker (Holiday)		Integrate revised tool set for CSM into your portfolio	
4	Advanced Continuous Learning (ACL)	Guest speaker engages students in discussion and skill-building activities	Bring print out of your RRDP ACL Chapter to class	
4	Advanced Continuous Learning —Practice	Student-led reflection & discussion about insights from chapter, lecture	Bring individual draft of ACL team-deliverable to class	
5	Team Project Discussion	Student-led discussion of skills & tools applied to the team project	Bring team draft of ACL team-deliverable to class	
5	Teams present idea for proposal and plan to do it	Instructor and peers offer feedback to proposal idea and plan to pursue it	Integrate revised tool set for ACL into your portfolio	
6	Responsive Project Management (RPM)	Guest speaker engages students in discussion and skill-building activities	Bring print out of your RRDP RPM Chapter to class	
6	Responsive Project Management —Practice	Student-led reflection & discussion about insights from chapter, lecture	Bring individual draft of RPM team-deliverable to class	
7	Team Project Discussion	Student-led discussion of skills & tools applied to the team project	Bring team draft of RPM team-deliverable to class	
7	Review Portfolio	Instructor and peers offer feedback to portfolio and discuss improvements	Integrate revised tool set for RPM into your portfolio	
8	Collaborative Teamwork (CTW)	Guest speaker engages students in discussion and skill-building activities	Bring print out of your RRDP CTW Chapter to class	
8	Collaborative Teamwork —Practice	Student-led reflection & discussion about insights from chapter, lecture	Bring individual draft of CTW team-deliverable to class	
9	Team Project Discussion	Student-led discussion of skills & tools applied to the team project	Bring team draft of CTW team-deliverable to class	
9	Reflection about team processes	Each team meets individually with instructor during weeks 8-9	Integrate revised tool set for CTW into your portfolio	
10	Fieldtrip (no class)	Students attend fieldtrip in groups and reflect about it in their teams		
10	Impactful Stakeholder Engagement (ISE)	Guest speaker engages students in discussion and skill-building activities	Bring print out of your RRDP ISE Chapter to class	
11	Impactful Stakeholder Engagement —Practice	Student-led reflection & discussion about insights from chapter, lecture	Bring individual draft of ISE team-deliverable to class	
11	Team Project Discussion	Student-led discussion of skills & tools applied to the team project	Bring team draft of ISE team-deliverable to class	
12	Dry-Run (Presentation and SHE Activity)	Work in progress report: dry-run of proposed activities / recommendations	Perform activity with participants	
12	Effective & Compassionate Communication (ECC)	Guest speaker engages students in discussion and skill-building activities	Bring print out of your RRDP ECC Chapter to class	
13	Effective & Compassionate Comm—Practice	Student-led reflection & discussion about insights from chapter, lecture	Bring individual draft of ECC team-deliverable to class	
13	Team Project Discussion	Student-led discussion of skills & tools applied to the team project	Bring team draft of ECC team-deliverable to class	
14	Presentation & SHE Action	Final presentation	Perform activity with participants	
14	Review Baseline Assessment of Professional Skills	Instructor and peers offer feedback to BAoPS and discuss improvements	Review BAoPS and identify needed tools & skills	
15	Synthesis	Reviewing tools and skills discussed in six professional domains	Complete portfolio, include toolbelt/list of tools	
15	Synthesis	Reviewing strategies for further enhancing skills in each area	Complete portfolio, include learning commitments	

Add/Drop Deadline

The deadline to add or drop this course without penalty is (Jan 12, 2016). After this date, if you choose to withdraw from the course, you may do so, but will receive a 'W' on your official transcript. For more details on dropping or withdrawing from courses, please visit: http://students.asu.edu/drop-add.

Technical Support Contact Information

Visit <u>contact.asu.edu</u> for frequently requested information or go to MyASU page>>Service Center tab where you can easily search for answers to your questions using ASU's Knowledge Base or access 24/7 live chat with one of our ASU Help Desk agents. Students also have access to several <u>computing sites</u>.

ASU Policy on Academic Integrity

ASU expects and requires all its students to act with honesty and integrity, and respect the rights of others in carrying out all academic assignments.

General guidelines for academic work include: (1) If you are quoting from a source, you must use quotation marks around that text AND cite that source. (2) If the text you are writing makes a specific and not commonly known point that is derived from a source, you must attribute that source. Paraphrasing, no matter what the source, requires attribution.

There are two important reasons for rules of attribution. One is to help your reader find anything he or she might want to pursue in greater detail. The other is to give credit where credit is due. Just because something is on the web or "in public domain" does not relieve the responsibility of providing appropriate attribution. Attribution is not about the legalities of copyright, but about the integrity of scholarship. The possible sanctions include, but are not limited to, appropriate grade penalties, course failure (indicated on the transcript as a grade of E), course failure due to academic dishonesty (indicated on the transcript as a grade of XE), loss of registration privileges, disqualification and dismissal. For more information, see http://provost.asu.edu/academicintegrity.

Threatening Behavior

In the case of threatening or disruptive behavior by a student, policies outlined in http://www.asu.edu/aad/manuals/ssm/ssm104-02.html will be followed.

Disability Policy Statement

Disability Accommodations: Qualified students with disabilities who will require disability accommodations in this class are encouraged to make their requests to me at the beginning of the semester either during office hours or by appointment. Note: Prior to receiving disability accommodations, verification of eligibility from the Disability Resource Center (DRC) is required. Disability information is confidential.

Establishing Eligibility for Disability Accommodations: Students who feel they will need disability accommodations in this class but have not registered with the <u>Disability Resource Center</u> (DRC) should contact DRC immediately. Their office is located on the first floor of the Matthews Center Building. DRC staff can also be reached at: 480-965-1234 (V), 480-965-9000 (TTY). For additional information, visit: www.asu.edu/studentaffairs/ed/drc. Their hours are 8:00 AM to 5:00 PM, Monday through Friday.

Additional Information and Resources

Student Conduct

Students are required to adhere to the standards listed in the Student Code of Conduct.

My ASU Service Center

For immediate assistance, call ASU at 1-855-278-5080.

Visit the My ASU Service Center (my.asu.edu/service) to get personalized support through 24/7 live chat or by submitting your request online.

Campus and Community Services

<u>ASU Libraries</u> - offers 24/7 access to librarians through "Ask a Librarian" online chat and help by librarians in person at the Reference Desk during most hours the libraries are open.

<u>Counseling and Consultation</u> – provides confidential mental health and career counseling services for all ASU students.

<u>EMPACT Crisis Hotline</u> – offers free 24-hour support for mental health crises. Call (480) 784-1500 in the Phoenix area, (866) 205-5229 for the toll-free number outside of Phoenix, and (480) 736-4949 for the sexual assault hotline. All services are free and confidential.

<u>Tutoring and Writing Centers</u> – provides students with academic support services such as tutoring, peer advising, computer assisted instruction, writing support, and supplemental instruction.

<u>Career Services</u> – offers assistance to students in choosing their major, setting career goals, interviewing and job hunting strategies.

<u>Financial Aid and Scholarship Services</u> – offers information and applications for student funding such as grants, loans, scholarships and student employment.

<u>Health Services</u> – provides non-emergency medical health care to all ASU students regardless of insurance status. Most visits with a physician or nurse practitioner are free of charge, but fees will be incurred for x-rays, lab results, etc.,

<u>Sun Devil Fitness</u> – offers individual and group fitness opportunities, as well as information on nutrition and wellness, and massages. Use of the general facilities (weights, circuit training and cardio machines) are free, other services (yoga classes, massages) are fee-based.

<u>Contact Arizona State University</u> – provides frequently asked question resources and contact information for new questions.

Professional Skills for Sustainability

An Introduction to
Communication, Teamwork, Project Management,
Stakeholder Engagement, Self-Management, and
Continuous Learning



Katja Brundiers, Arnim Wiek

In Collaboration with Braden Kay and Tamsin Foucrier

School of Sustainability, Arizona State University

Disclaimer

This is a book draft – it is only intended for use by the student of SOS 230 (Instructor: Katja Brundiers) in the School of Sustainability at Arizona State University during the Spring 2016 term (Sessions A & B). Distribution or any other type of use is not permitted.

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Suggested Citation

Brundiers, K., Wiek, A., Kay, B., & Foucrier, T. (2015). *Professional Skills for Sustainability – An Introduction to Communication, Teamwork, Project Management, Stakeholder Engagement, Self-Management, and Continuous Learning*. School of Sustainability, Arizona State University, Tempe, AZ.

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Preface

Sustainability professionals need a great deal of specialist expertise and competence in technical procedures for their professional practice. Yet, while necessary, technical knowledge and skills are *not sufficient* for successful completion of professional tasks. *General* professional skills in communication, teamwork, project management, or stakeholder engagement are equally important, often enabling sustainability professionals to fully utilize their technical expertise. In many professional situations, it might not matter, for example, how much a sustainability professional knows about the reduction of greenhouse gas emissions, if she/he is not able to effectively communicate about it. Specialist *and* general professional skills are the two sides of the same coin – if one is missing, a sustainability professional will not succeed.

Today, general professional skills are not sufficiently taught in most university programs. Unfortunately, sustainability programs are no exception. While there is still a bit left of the prejudice that general professional skills can be learned 'on the job', it is now increasingly recognized that *specific training* is necessary to build these skills. Training in communication, teamwork, project management, or stakeholder engagement is as demanding as it is rewarding. It needs to be taught and learned with full attention and effort to yield a level of mastery that really advances professional sustainability practice.

The skills introduced in this book pertain to communication, teamwork, project management, stakeholder engagement, self-management, and continuous learning. Most of them are linked to *interpersonal competence*, one of the key competencies in sustainability. We have compiled these six skill sets, as they are the ones most relevant for the large majority of sustainability professions. As far as other skills are relevant, too, such as leadership skills, we have integrated them into one or more of the six skill sets. *General* professional skills are not specific to any sustainability profession. Effectively communicating, competently facilitating meetings, or successfully preventing unhealthy levels of distress are exemplary skills. They are equally essential for a sustainability program manager in a city administration, a sustainability officer in a company, or a sustainability expert working for a non-profit organization.

This book is written for undergraduate and graduate students, early-career professionals, as well as course instructors. It is deliberately designed as an *introductory* book that provides a solid foundation in all general skill domains relevant to sustainability professionals. There are comprehensive books on each of the six skill sets on the market, often detailing one specific skill set on several hundreds of pages (e.g., Herold Kerzner's classic on project management is more than a thousand pages long). We have distilled key information from those seminal books and also used professional experiences from our project partners and alumni —aiming at an *introductory* level of skillfulness. We recommend additional resources for each skill set, but have abstained from extensive referencing in the text in order to maintain good readability.

Some of the guidelines and tools for professional skills are not yet fully supported by evidence (they are not yet *evidence-based*). We expect the critical and self-directed learner to not just blindly apply the guidelines presented, but resume control of your professional skill development. There are many ways to keep up with the latest advancements – searching for critical reviews on tool effectiveness, sharing experiences and receiving feedback at professional conferences, or participating in virtual discussions among practitioners (e.g., *The Guardian*'s Small Business Network).

Obviously, we would be curious to learn from your experiences and insights, too – please feel free to contact us with insights, feedback, or comments.

Good luck with your impactful work!

Katja Brundiers, Arnim Wiek – Tempe, AZ, December 2015

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Chapter 1

Introduction

Arielle Model had been an excellent student, graduating at the top of her cohort from a leading sustainability program at a well-respected university in the U.S. While braced with a great deal of specialist knowledge and competent in various technical procedures, unexpectedly, she was at a loss when she started her first sustainability job. As she got her assignments, she instantly realized that for completing these tasks there were skills necessary that she had no training in. She was asked to report to the executives, elicit feedback from external stakeholders, fulfill project management tasks, and to facilitate team meetings, among other tasks. While nominally being a fully competent sustainability professional, Arielle lacked essential professional skills. Now being in the midst of professional practice, she whished her studies would have better balanced specialist training with practicing general professional skills such as communication, teamwork, project management, stakeholder engagement, and so forth.

Arielle's early-career experiences are not the exception but rather the rule. A recent empirical study on sustainability leadership programs concludes that "negotiation, public speaking, facilitation, and coalition building skills are highly valued by survey participants in the workplace, yet under-delivered in [sustainability leadership] programs".¹

The International Society of Sustainability Professionals has convened expert panels, undertaken surveys, analyzed job profiles, and reviewed documents in working towards certification and accreditation schemes for sustainability professionals. Through their broad inquiries they recognized the importance of skills such as communication, teamwork, project management, and stakeholder engagement for professional sustainability practice.² These professional skills are now being regarded as critical for successfully conducting professional sustainability practice in any segment of the job market. There will still be experts for sustainability communication, project management, or stakeholder engagement. Yet, a basic level of proficiency in these skills is more and more expected from any sustainability professionals, irrespective of his/her expertise in water management, transportation engineering, or public health services provision. Sustainability professionals, associations, employers, and educators around the world have echoed the call for building capacity in these skill sets.

While the need is widely recognized, quality training programs have yet to be broadly established. Currently, the majority of sustainability programs initiated or in operation does not

¹ MacDonald, L. & Shriberg, M. (2015, in press). Sustainability leadership programs in higher education: alumni outcomes and impacts. *Journal of Environmental Studies and Sciences*.

² Willard, M, Wiedmeyer, C., R Flint, R.W., Weedon, J.S., Woodward, R., Feldman, I., & Edwards, M. (2010). The Sustainability Professional: 2010 Competency Survey Report. A Research Study Conducted by the International Society of Sustainability Professionals (ISSP). And: International Society of Sustainability Professionals (ISSP) (Ed.). (2013). Sustainability Practitioner: Body of Knowledge. https://www.sustainabilityprofessionals.org/publications

provide sufficient educational opportunities for students to acquire these skills. Moreover, the resources available for skill development are often focused on each professional skill domain individually, such as communication or project management, and are often too detailed. In addition, they are not tailored to the audience of *sustainability* professionals specifically.

The book in hands attempts to bridge this gap by offering structured introductions into the main *general* skill sets sustainability professionals need to have a sufficient level of mastery in. We focus on the essentials of professional skills that enable, support, and enhance professional sustainability practice.

1 Learning Objectives

In this chapter, we provide a short overview of the relevant professional skills and then give some information on how to use the book for professional development. After reading and working through the content of this chapter, the reader should be able to:

- Explain what the most relevant general professional skills for sustainability are.
- Justify why they are important for any sustainability profession.
- Describe how to best learn and train these professional skills.
- Anticipate how the book supports such training through its structure and content.

2 What are professional skills for sustainability?

General professional skills are not specific to any profession. Accordingly, the U.S. Department of Labor summarizes professional behavior as being "responsible, ethical, and team oriented" and possessing "strong communication, interpersonal, and problem solving skills". Such skills are often labeled "soft skills" as opposed to specialist expertise and technical skills, which are considered "hard skills." We do not regard this contrasting labeling as particularly productive, as it seems to suggest "soft skills" being an optional addendum to an indispensable set of "hard skills." This, however, is an outdated prejudice that is now being replaced by the conviction that specialist skills and general professional skills are equally important and mutually reinforcing. For example, technical knowledge on water-efficient irrigation technologies is necessary for sustainable development projects. Good communication skills, however, allow sustainability engineers to explain the function and benefits of such technologies to famers, investors, and politicians alike, which helps initiating and advancing such projects. There is amounting evidence

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³ US Department of Labor, Office of Disability Employment Policy (n.d.). Skills to Pay the Bills: Mastering Soft Skills for Workplace Success. Retrieved August 22, 2015, from: http://www.dol.gov/odep/topics/youth/softskills/

that general professional skills, and their variations of social and interpersonal skills, are relevant beyond professional practice, often advantageously influencing personal and social life as well.⁴

General professional skills pertain to a broad spectrum of behavior and attitudes, ranging from basic manners to self-motivation and empathy. There are various ways of structuring general professional skills. In this book, we propose focusing on what sustainability professionals actually do when they activate these skills. In short, we discuss professional skills by means of activities. We differentiate six activities and corresponding skills that are relevant for professional sustainability practice. While each of these activities and skill sets can be mastered on different levels (from novice to full proficiency), we emphasize the particular quality in executing this activity through a representative attribute. For example, the first activity and skill is communication – yet, not any kind of communication, but effective and compassionate communication is what matters in professional sustainability practice.

- 1. Effective and Compassionate Communication consists of verbal or written interactions between two or more people that yield agreement, shared information, or asserted support (depending on the communication intentions). Yet, it does not only reach the primarily intended outcome, such as delivering a message (effectiveness). It also strengthens the relationship between sender and receiver by being attentive, interested, empathetic, and caring (compassion). Effective and compassionate communication entails in its core phase a distinct set of speaking and writing activities, namely, inquiring, presenting, negotiating, providing feedback, or resolving conflicts; as well as associated non-verbal expressions. Similar to speaking and writing, the receiving communication partner is not just listening or reading, but also observing (if possible), reflecting, and relating to the message. This is what is meant by the active process of 'interpreting a message'. Like the non-verbal expression of the person speaking, facial expression, body posture, and gestures are important components of receiving a spoken message, too. Communication is an integral part of several of the other professional skills. For example, facilitating an open, productive, and mutually engaging discussion among stakeholders; or presenting in succinct and inspiring ways on a project to a diverse public audience; or leading a team meeting effectively; or providing constructive feedback to a team member in an internal review process of project deliverables. Key to effective and compassionate communication is the selection of appropriate communication media and technologies. For all of these processes and elements, there are good-practice guidelines that we will address in the respective chapter below.
- Collaborative Teamwork is when two or more people optimally utilize different types of
 expertise and professional skills in order to fulfill a complex sustainability task. While
 pursuing and achieving high-quality task delivery (task effectiveness), collaborative
 teamwork facilitates teamwork in a viable, stimulating, friendly, and healthy work

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⁴ See the recent article in *The New York Times* (July 24, 2015) by David Bornstein on "Teaching Social Skills to Improve Grades and Lives."

environment. It also allows for the pursuit of additional professional objectives, other than just task delivery, including satisfaction, stimulation, professional network, professional skill development, personal development, friendly work environment, appreciation, and loyalty. Collaborative teamwork contains in its core phase a distinct set of interactions, namely, project management in team meetings; team members working together on project deliverables; and team interactions with social orientation. Three important aspects of all teamwork interactions are the level, the mode, and the technologies used in these interactions. One can easily get lost in in the richness of collaborative teamwork. The numerous activities, include among others, preparing for team meetings (e.g. reviewing the agenda, preparing discussion points, reviewing documents), arriving on time, following up on assignments, helping teammates, presenting in a team, and coping with disagreement and tensions. Collaboration holds multiple benefits such as accomplishing ambitious goals, improving communication skills, increasing creativity, and building a professional network. However, working in teams also poses challenges. These challenges include coordination, compromise, and conflicts that emerge from differing personalities, cultural perspectives, professional experiences, expertise, and work ethics. In collaborative teamwork the team is able to weather these challenges and be successful in their projects. For all of these processes and elements, there are good-practice guidelines and tools available that we will address in the respective chapter below.

3. Responsive Project Management is the structured process of achieving aspired project outcomes - namely, the enhanced sustainability performance of a company, organization, city, etc. – within a given timeframe, budget, and other constrains. A key success factor for responsive project management is that the main constituency, e.g., clients, stakeholders, customers, and/or users, accepts and uses the project outcomes. Responsive project management emphasizes the skill to anticipate necessary changes to the project scope and process in order to secure project success. Even structural changes might be necessary for this, such as changing the culture and policies of the organization and related workflows. Responsive project management contains in its core phase a distinct set of interactions, namely, time management, controlling, organizing, and strategically reflecting about the project processes. Responsive project management is not a straight jacket, forcing dynamic and often unpredictable project processes into a streamlined approach. On the contrary, responsive management is a reflective process, based on thoughtful actions that consider how the project is embedded in a wider context. It anticipates possible short-term and long-term outcomes, which result from the interactions between the project and its context. Responsive project management serves as a backbone and anchor point that allows the project to be open to change and respond flexibly. Similar to other general professional activities and skills, responsive project management also allows for the pursuit of additional professional objectives other than just task delivery. For all of these processes

- and elements, there are good-practice guidelines and tools available that we will address in the respective chapter below.
- 4. Impactful Stakeholder Engagement is the successful interaction between sustainability professional(s) and people who have a stake in the professional practice, for example, they sponsor it, they benefit from it, or they might be negatively affected by it. Impactful stakeholder engagement yields task outcomes such as quality project deliverables; as well as social outcomes, including good working relationships, a professional network, professional skill development, and personal development. Key activities of impactful stakeholder engagement - similar to collaborative teamwork activities - are to organize listening sessions that allow stakeholders to air their concerns, impressions, ideas; to facilitate open and productive discussions among diverse or homogeneous stakeholder groups; to collaborate with stakeholders on project deliverables; to elicit feedback from stakeholders on project deliverables; and so forth. There are specific settings for all of the activities, namely interview, survey, focus group, walking audit, and workshop. Each stakeholder setting displays a particular level, mode, and engagement mechanism. For all of these processes and elements, there are good-practice guidelines and tools available that we will address in the respective chapter below.
- 5. Caring Self-Management is the process of successfully aligning professional performance with personal wellbeing. Professional tasks are being fulfilled, successfully preventing or coping with negative experiences, like distress, frustration, fatigue, or burnout. Key activities of caring self-management are successfully managing one's own professional activities (e.g., goals, tasks, time); managing one's work-related well-being (e.g., knowing personal vulnerability/resilience levels and energy curve; stress reduction exercises at work); managing oneself in professional interactions (e.g., keeping disruptive emotions/impulses in check; sensing others' feelings and perspectives and taking an active interest in their concerns); and managing one's work environment (e.g., desk, light, plants). Prominent examples within these four types are self-motivation, self-regulation, and self-organization. Self-motivation within the professional world means pro-actively seek ways to advance the project, the team, or the company, for instance. Self-motivation can be expressed by responding to an issue your team is grappling with by crafting a constructive proposal and seeking feedback on implementation steps. Self-regulation refers to the ability to be aware of one's emotions and to control them. For example, you might need to keep a calm and constructive demeanor even when a colleague displays a passive-aggressive attitude in a discussion. Self-regulation also pertains to developing a healthy work-life balance. Taking the appropriate time for rest and recreation is essential in fostering lasting motivation, commitment, and overall well-being. Lastly, self-organization refers to the ability to stay on task, have access to project material when needed, and keep an overview of project deliverables. For all of these processes and elements, there are good-practice guidelines and tools available that we will address in the respective chapter below.

6. Advanced Continuous Learning is mindfully and in a self-directed way expanding one's technical expertise (knowledge and procedures), professional skills (the ones discussed in this book), and attitudes by using appropriate procedures. The goal of advanced continuous learning is to effectively enhance or maintain professional performance and successfully deal with short- to long-term emerging challenges and new requirements over the lifespan of one's professional career. Advanced continuous learning emphasizes pro-active, generative, and transformative learning over reactive and adaptive learning. For all of these processes and elements, there are good-practice guidelines and tools available that we will address in the respective chapter below.

Leadership is not treated as a separate professional skill here because we consider leadership as integral component of some of the other skills, such as collaborative teamwork or impactful stakeholder engagement. Leadership in this sense refers to ideas of leading *from behind*, being a *second* leader (enabler), and organizing *distributed* leadership.

Finally, it is important to remember that the general professional skills are introduced here as skills *supporting* and *enabling* professional sustainability practice in *any* field of application and *any* segment of the workforce (Figure 1). Simply put, they assist sustainability professionals in doing their sustainability job *well*. Professional sustainability practice in general can be structured into a sequence of steps from preparing and planning to implementing and evaluating programs or projects in order to create or foster renewable energy supply, sustainable water management, affordable health provision, etc. The six professional skill sets dealt with in this book are complementary to technical expertise and critical for doing all of these activities and tasks in a professional and successful way.

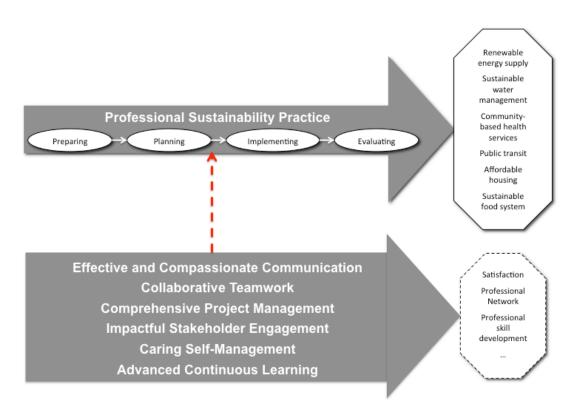


Figure 1. Link between regular sustainability practice in any field of application (upper part) and the six professional skills (lower part) supporting successful job performance (red arrow).

There will still be experts for sustainability communication, project management, or stakeholder engagement, i.e., experts in one or more of the professional skill sets. Yet, the focus of this book is *not* on educating *these* experts. This is a training program for the regular sustainability professional from any kind of field who looks for building a sufficient level of proficiency in all six professional skill sets in order to better do her/his job. So, it is neither an expectation nor an intention to transform sustainability engineers, health professionals, urban planners, or other sustainability professionals into professional communicators or project managers. Instead, the training should empower sustainability professionals to do *their* jobs with greater capacity, confidence, and impact.

3 Why are professional skills important for sustainability professionals?

Sustainability problems are complex, with long and indirect cause-effect chains, differing spatial and temporal scales, and competing stakeholder interests. Working on solutions to these problems does not only require specialist knowledge and technical skills. General professional skills become essential for success. Accordingly, there is an increasing level of professionalism expected in sustainability jobs as sustainability professions are maturing. Sufficiently understanding the complexity of the problems and designing sufficiently sophisticated solutions – these crucial sustainability tasks demand many different types of expertise and backgrounds,

calling for collaborative teamwork and impactful stakeholder engagement. Hence, in numerous sustainability programs and projects we observe a proliferation of collaboration, including alliances, networks, and partnerships. Such arrangements occur within, but also across businesses, non-profit organizations, and public agencies. At the core of these arrangements are *individual professionals*, whose professional collaborative skills are pivotal for success or failure.

Collaborative teamwork and impactful stakeholder engagement, however, are often challenging, as power asymmetries, competing interests, and hidden agendas come into play. A Sustainability Program Manager working for a multi-national corporation elaborates on this point and how to deal with this challenge: "A sustainability professional is someone who seeks to change the system – a system, over which you don't have much control. Influence is essential in changing the system though and this only comes from building strong internal and external ties. Specific professional skills are necessary to build positive relationships and alliances to move the sustainability agenda forward." ⁵

Only sufficient training and a critical level of skillfulness will allow professional to utilize teamwork and stakeholder engagement towards widespread sustainability outcomes. Effective and compassionate communication is key, too, building the foundation for several of the other general professional skills.

The change-oriented nature of professional sustainability practice calls for an *ensemble* of general professional skills, rather than a few in-depth individual skills. As a Sustainability Officer at a city administration puts it: "Sustainability agendas are not always a priority for organizations, corporations, or cities. Sustainability professionals often have to fight for people to see sustainability as critical to the economic bottom line. We need the full suite of skills to operate as a professional. We have to be everything from consultant to sales persons to therapists in order to make people caring about and moving on the sustainability agenda. You need to be multiple-trick pony, and to do that, you need to be proficient in communication, teamwork, project management, and so forth."

Professional sustainability practice does *not* call for *either* technical expertise only *or* general professional skills only. Instead, it calls for a productive interplay between both spheres. Let's review the case of a Technical Advisor to a low-income neighborhood community that is exposed to toxins from a superfund site. While a degree in geology and professional experiences as a technical consultant on remediation projects allowed this professional to understand the contamination issues on site, he had a long way to go in developing general professional skills essential for this task. First, there was the challenge to translate the scientific facts into information accessible for a culturally diverse and low-income community. In this community, many inhabitants struggled with the lack of basic English language proficiency, poor education in science and technology issues, as well as a lack of time to engage with such issues ('working

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⁵ Personal communication from February 20, 2015. Name and organization anonymized.

⁶ Personal communication from February 25, 2015. Name and organization anonymized.

poor'). Second, there was the challenge to mediate between various knowledge claims, values, and solution strategies. Simply observing the fierce discussions among federal administrators, community members, advocacy groups leaders, responsible parties, and lawyers at stakeholder and expert meetings gave this professional a sense for the wickedness of the problem at hand. Yet, it also made him realize how poorly his studies prepared him for this type of sustainability practice – leaving most general professional skills unaddressed.

4 How to learn professional skills for sustainability

Against the ubiquitous learning-by-doing ideology, the best way of learning professional skills is *not just* doing them. Doing, while a critical ingredient, is not enough – learning only happens when structured inputs, reflection, and adjustment are added. It all starts with knowing where you stand (baseline assessment) and where you want to be at a given time in the future (goals). These serve as reference points for skill development and learning as an active and conscious process. The 'doing' benefits from being aligned with, or at least informed by, professional practice in the real world. Thereby, observing, shadowing, and taking to sustainability professionals (ideally also working with them), are favorable settings for initially building professional skills. Studying good-practice guidelines, as compiled in the literature (and in this book), allows for complementing and critically reflecting on the observed practices. Experimenting, adjusting, and further practicing completes the learning process. Yet, it never really stops. A critical ingredient of professional sustainability practice is the motivation to continuously advance one's skill set, as new requirements, challenges, and opportunities emerge. Let's have a closer look into these different learning activities and how they relate to each other.

1. Do a baseline assessment and set goals for professional skill development

The development of general professional skills best starts with a baseline assessment. The second reference point for professional skill development is the goal you intend to achieve in each of the six professional skills (level of proficiency).

2. Observe, shadow, and talk to sustainability professionals

It starts with identifying sustainability professionals. This is a good opportunity to become aware of your current professional network and to expand it by searching for more sustainability professionals. They might be willing to meet with you in person or virtually. You might even be able to establish a mentorship, if desirable. If direct personal contact is not possible, there are many other means of accessing such information, e.g., TED talks or documentaries on professional sustainability practice.

Here are some good-practice guidelines for shadowing a professional:

- Research the professional's background, projects, and accomplishments. This allows you
 making relevant observations, understanding the significance of certain conversations,
 and asking meaningful questions (if you can).
- Anticipate the shadowing by reviewing related material (pictures, documents, etc.). This
 primes your brain and effectively facilitates your observations when shadowing the
 professional.
- When shadowing in person, be respectful and highly attentive. Try to take in as much information as you can, and store it for reflections at a later stage.
- Keep an observational report in which you describe what and how people in professional sustainability practice utilize the six general professional skills and to what effect (e.g., what were the impacts on the project result, the team, stakeholders, etc.).

In case, the opportunities to shadow and observe sustainability professionals in-vivo are limited, you could also observe other professionals and learn from them. As the skills in question are, at least to some extent, practiced outside of sustainability professions, there should be plenty of opportunities around you.

3. Review available resources

Each of the six professional skills domains is well documented online, in handbooks, and in the academic literature. Numerous sets of guidelines, templates, tools, software programs, exists, out of which the most relevant have been complied in this book. Careful reviewing the chapters in this book is a good start. In addition, you might want to become aware of the most pertinent sources available for all six professional skill domains. Follow our reading recommendations at the end of each chapter, but also browse the web and the library's catalogue for determining a list of the 3-5 top sources that you could consult with in the future. If you search with the keywords "sustainability skills workforce" you will receive a diverse listing of current job ads (in various sectors), sources from leading organizations (e.g., the Organization for Economic Cooperation and Development (OECD), International Society of Sustainability Professionals (ISSP))), as well as magazine and newspaper articles (e.g., *The Guardian*). Following these links offers a wide array of real-world examples where general professional skills matter to sustainability professionals.

4. Practice and experiment with the skills

Each chapter in this book entails a number of practice exercises. You can do them by yourself, with a peer or colleague – but also, and often most beneficially performed in a team. While reading up on skills provides important background information, this is no substitute for practice. Here you put your knowledge and skills to the test. Applying and experimenting with

your skills allows you to later reflect on your experience and to request feedback from peers on your performance. You can then identify how to keep your talents and improve in areas you have deficits. Active simulation and role-play can help practicing in setting close to the real world.

5. Reflect on your practice experiences as well as on your professional practice

Reflection is the critical and constructive introspection on one's own mastery of professional skills. Irrespective of whether you practiced or performed in your regular professional practice, reflection is the key to learning and skill acquisition and development. The following steps support a structured learning process:

- 1. Describe the task you had to fulfill and how you fulfilled it (indicating what professional skill it pertained to). Writing down your observations helps processing the information, as you are revisiting what you have actually done (often not trivial).
- 2. Assess this quality of task fulfillment against the good-practice guidelines (observed in the practice of sustainability professionals or reviewed in the respective chapter of this book).
- 3. Using this assessment, review your learning goals and skill development strategy, and make adjustments, if necessary.

Team members, peers, colleagues, or a mentor can support you in the reflection process by providing additional or alternative observations and feedback on your performance.

6. Do a team project

Team projects provide a rich setting for developing professional skills. Yet, they are also resource-intense, and thus, need to be carefully designed and conducted to fulfill their purpose. A team project allows practicing professional skills in a collaborative and trusting environment, in which each team members observe and provide constructive feedback on each others' performance. Such team projects are less about developing deliverables and more about simulating a professional, yet safe, real-world situation. Each team should include a small number of team members (3-5) to allow for intensive learning experiences. We recommend you allow for a few weeks to prepare the team project, if possible close to a project you work on or plan on working on. Listed below are design parameters that have proven to yield rich project experiences:

- Address a sustainability problem in your area of expertise or interest that is present in the local context – which allows for fieldtrips and stakeholder engagement
- Identify and spark interest in potential partners ("client") and other stakeholders

- Focus on developing a solution to the selected sustainability problem within the available timeframe and budget
- Identify opportunities for professional skill development

More resources to plan for and conduct such a team process can be found in the chapter on teamwork, below.

5 How this book supports training professional skills

This book supports the development of general professional skills for sustainability through a structured training program. As learning is generally based on pattern recognition, we present all skills domain in similar ways. First, there is the basic structure of each chapter:

- 1 Learning Objectives
- 2 What is skill X? [Basic skill, without qualifier(s)]
- 3 What is skill X on a quality level [with qualifier(s)] and why is it important for sustainability professionals?
- 4 How to do (best practices in doing) skill X on a quality level [with qualifier(s)]
- 5 Take-home Messages
- 6 Self-Test
- 7 Resources

Second, for comparison reasons, we present the key concepts for each skill in a similar format, which becomes most obvious in the leading figures produced for each skill set.

Third, all good-practice guidelines are provided on the same two levels:

- 1. Take a step-wise approach to your professional communication, teamwork, project management, etc. (we suggest a sequence of steps)
- 2. In each step, take a quality approach and follow good-practice guidelines for doing each step.

Apart from these structural similarities that should allow for easier processing of the key information, we have provided numerous case examples and practical exercises that should support the internalization of concepts, practices, and application contexts.

6 Take-home Messages

 It is increasingly recognized that specialist skills and general professional skills are equally important for professional sustainability practice and mutually reinforcing.

- Professional sustainability practice does *not* call for *either* technical expertise *or* general professional skills. Instead, it calls for a productive interplay between both spheres.
- The productive interplay between technical expertise and general professional skills is
 particularly important in sustainability because of the nature of sustainability problems
 and corresponding solution pathways, because both—sustainability problems and
 solution pathways—are very complex, highly contested due to competing stakeholder
 interests, and dynamically changing.
- Learning and practicing professional skills in sustainability is a self-directed, structured, and reflective process. In particular collaborative teamwork, impactful stakeholder engagement, and caring self-management, are often challenging and require mindful assessment and improvements of one's professional practice, as power asymmetries, competing interests, and hidden agendas come into play adding pressure on sustainability professional's performance.

7 Reflection questions

- 1. What is an accurate and complete definition of general professional skills for sustainability?
- 2. What are two activities that you can do to train your professional skills on an ongoing basis? What are the two necessary tasks that you need to complete prior to starting your training?