

Higher Education and Research English

Instructor guide for advanced ESL learners working in higher education and research

Audience: faculty, postdoctoral researchers, graduate students, lab managers, research administrators, grant staff, ethics-board coordinators, and academic program leaders

Focus: A higher education and research English curriculum for grant proposals, lab meetings, peer review, research ethics, authorship, data management, academic presentations, and institutional collaboration.

Designed for advanced ESL learners who already use professional English and need industry-specific terminology, realistic meetings, role-play pressure, careful pushback, and polished workplace outputs.

Teaching stance: this is language and workplace-communication training, not legal, medical, financial, safety, or regulatory advice. Instructors should connect every scenario to the learner's current company policies, local rules, and approved procedures.

Purpose and Course Logic

A higher education and research English curriculum for grant proposals, lab meetings, peer review, research ethics, authorship, data management, academic presentations, and institutional collaboration.

Core language challenge

Advanced learners do not only need vocabulary. They need the ability to ask which standard applies, who owns the decision, what evidence is sufficient, what risk is being accepted, and how to disagree without sounding vague, defensive, or reckless.

Each module trains a realistic workplace pressure point with role-specific terms, decision language, pushback practice, and a written output learners can adapt to their own work.

Course objectives

- Use higher education and research terminology accurately in meetings, written updates, handoffs, escalations, reviews, and client or stakeholder conversations.
- Turn vague requests into specific questions about evidence, owner, deadline, constraint, risk, and decision rights.
- Push back on unsafe, unsupported, noncompliant, unrealistic, or poorly scoped proposals while preserving professional trust.
- Handle realistic dialogues from the field, including conflict, uncertainty, documentation gaps, customer or stakeholder pressure, and cross-functional disagreement.
- Produce concise workplace outputs: briefing notes, escalation updates, meeting scripts, risk memos, decision records, and follow-up messages.

Instructor Module Plans

Module 1. Research Questions and Study Design (90 minutes)

Frame research claims with scope and methodological discipline.

Learners should be able to

- Use these terms accurately: research question, hypothesis, methodology, limitation.
- Explain the workplace tension: Hypothesis, design, sample, limitations, and inference must be aligned.
- Respond professionally when a stakeholder says: Use stronger language to attract attention.
- Draft a usable study-design caveat with facts, caveats, owner, and next step.

Customized scenario

Workplace pressure

A lab wants to describe an exploratory study as definitive.

Use stronger language to attract attention.

Hypothesis, design, sample, limitations, and inference must be aligned.

Classroom sequence

1. Terminology drill: define each term, then use it in one sentence from the learner's own role.
2. Risk map: identify the stakeholder, the decision, the evidence gap, the operating constraint, and the cost of being wrong.
3. Pushback ladder: move from clarifying question to evidence-based objection to consequence to decision request.

4. Output lab: draft and revise a study-design caveat.

Module 2. Grant Proposals and Specific Aims (90 minutes)

Write aims that are ambitious but testable.

Learners should be able to

- Use these terms accurately: specific aims, significance, innovation, feasibility.
- Explain the workplace tension: Feasibility, significance, innovation, approach, and milestones need balance.
- Respond professionally when a stakeholder says: Keep every aim to look comprehensive.
- Draft a usable specific-aims revision with facts, caveats, owner, and next step.

Customized scenario

Workplace pressure

A proposal includes too many objectives for the budget.

Keep every aim to look comprehensive.

Feasibility, significance, innovation, approach, and milestones need balance.

Classroom sequence

1. Terminology drill: define each term, then use it in one sentence from the learner's own role.
2. Risk map: identify the stakeholder, the decision, the evidence gap, the operating constraint, and the cost of being wrong.
3. Pushback ladder: move from clarifying question to evidence-based objection to consequence to decision request.
4. Output lab: draft and revise a specific-aims revision.

Module 3. Lab Meetings and Data Challenges (90 minutes)

Question data respectfully but rigorously.

Learners should be able to

- Use these terms accurately: control, replication, protocol drift, analysis assumption.
- Explain the workplace tension: Controls, replication, protocol drift, and analysis assumptions need review.
- Respond professionally when a stakeholder says: Say the data are bad.
- Draft a usable lab-meeting question set with facts, caveats, owner, and next step.

Customized scenario

Workplace pressure

A student presents inconsistent results.

Say the data are bad.

Controls, replication, protocol drift, and analysis assumptions need review.

Classroom sequence

1. Terminology drill: define each term, then use it in one sentence from the learner's own role.
2. Risk map: identify the stakeholder, the decision, the evidence gap, the operating constraint, and the cost of being wrong.
3. Pushback ladder: move from clarifying question to evidence-based objection to consequence to decision request.

4. Output lab: draft and revise a lab-meeting question set.

Module 4. Research Ethics and Human Subjects (90 minutes)

Set boundaries around consent, risk, and protocol adherence.

Learners should be able to

- Use these terms accurately: IRB, informed consent, secondary use, human subjects.
- Explain the workplace tension: Consent, IRB approval, privacy, and secondary-use rules may apply.
- Respond professionally when a stakeholder says: Analyze it because the data already exist.
- Draft a usable ethics consultation note with facts, caveats, owner, and next step.

Customized scenario

Workplace pressure

A researcher wants to use data for a new question outside the approved protocol.

Analyze it because the data already exist.

Consent, IRB approval, privacy, and secondary-use rules may apply.

Classroom sequence

1. Terminology drill: define each term, then use it in one sentence from the learner's own role.
2. Risk map: identify the stakeholder, the decision, the evidence gap, the operating constraint, and the cost of being wrong.
3. Pushback ladder: move from clarifying question to evidence-based objection to consequence to decision request.
4. Output lab: draft and revise a ethics consultation note.

Module 5. Authorship, Collaboration, and Credit (90 minutes)

Discuss contribution and authorship early.

Learners should be able to

- Use these terms accurately: authorship, contribution, corresponding author, acknowledgment.
- Explain the workplace tension: Contribution, criteria, order, acknowledgments, and publication norms must be explicit.
- Respond professionally when a stakeholder says: Agree to avoid conflict.
- Draft a usable authorship agreement draft with facts, caveats, owner, and next step.

Customized scenario

Workplace pressure

A collaborator expects authorship after a small advisory role.

Agree to avoid conflict.

Contribution, criteria, order, acknowledgments, and publication norms must be explicit.

Classroom sequence

1. Terminology drill: define each term, then use it in one sentence from the learner's own role.
2. Risk map: identify the stakeholder, the decision, the evidence gap, the operating constraint, and the cost of being wrong.
3. Pushback ladder: move from clarifying question to evidence-based objection to consequence to decision request.

4. Output lab: draft and revise a authorship agreement draft.

Module 6. Peer Review and Revision Responses (90 minutes)

Respond to criticism without defensiveness.

Learners should be able to

- Use these terms accurately: peer review, major revision, response letter, scope.
- Explain the workplace tension: Tone, evidence, scope, feasibility, and transparent limitations matter.
- Respond professionally when a stakeholder says: Reject the comment sharply.
- Draft a usable reviewer-response paragraph with facts, caveats, owner, and next step.

Customized scenario

Workplace pressure

Reviewers ask for additional analyses outside the original scope.

Reject the comment sharply.

Tone, evidence, scope, feasibility, and transparent limitations matter.

Classroom sequence

1. Terminology drill: define each term, then use it in one sentence from the learner's own role.
2. Risk map: identify the stakeholder, the decision, the evidence gap, the operating constraint, and the cost of being wrong.
3. Pushback ladder: move from clarifying question to evidence-based objection to consequence to decision request.
4. Output lab: draft and revise a reviewer-response paragraph.

Module 7. Data Management and Reproducibility (90 minutes)

Explain data stewardship and reproducible workflows.

Learners should be able to

- Use these terms accurately: metadata, repository, provenance, reproducibility.
- Explain the workplace tension: Metadata, code, provenance, privacy, and repository requirements need attention.
- Respond professionally when a stakeholder says: Upload it anyway.
- Draft a usable data-management checklist with facts, caveats, owner, and next step.

Customized scenario

Workplace pressure

A dataset lacks clear metadata before publication.

Upload it anyway.

Metadata, code, provenance, privacy, and repository requirements need attention.

Classroom sequence

1. Terminology drill: define each term, then use it in one sentence from the learner's own role.
2. Risk map: identify the stakeholder, the decision, the evidence gap, the operating constraint, and the cost of being wrong.
3. Pushback ladder: move from clarifying question to evidence-based objection to consequence to decision request.

4. Output lab: draft and revise a data-management checklist.

Module 8. Academic Presentations and Conferences (90 minutes)

Present claims with confidence and caveats.

Learners should be able to

- Use these terms accurately: generalizability, limitation, future work, conference Q&A.
- Explain the workplace tension: Population, context, method, and future work should be addressed calmly.
- Respond professionally when a stakeholder says: Defend every conclusion.
- Draft a usable conference Q&A response with facts, caveats, owner, and next step.

Customized scenario

Workplace pressure

A conference audience challenges the study's generalizability.

Defend every conclusion.

Population, context, method, and future work should be addressed calmly.

Classroom sequence

1. Terminology drill: define each term, then use it in one sentence from the learner's own role.
2. Risk map: identify the stakeholder, the decision, the evidence gap, the operating constraint, and the cost of being wrong.
3. Pushback ladder: move from clarifying question to evidence-based objection to consequence to decision request.
4. Output lab: draft and revise a conference Q&A response.

Nomenclature and Jargon

These are classroom working definitions. Learners should adapt wording to their organization's policies, systems, and local regulatory environment.

Research Questions and Study Design

Term	Working meaning
research question	Working higher education and research term used in research questions and study design; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
hypothesis	Working higher education and research term used in research questions and study design; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
methodology	Working higher education and research term used in research questions and study design; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
limitation	Working higher education and research term used in research questions and study design; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Grant Proposals and Specific Aims

Term	Working meaning
specific aims	Working higher education and research term used in grant proposals and specific aims; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Term	Working meaning
significance	Working higher education and research term used in grant proposals and specific aims; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
innovation	Working higher education and research term used in grant proposals and specific aims; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
feasibility	Working higher education and research term used in grant proposals and specific aims; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Lab Meetings and Data Challenges

Term	Working meaning
control	A process, approval, check, or technical safeguard designed to reduce risk.
replication	Working higher education and research term used in lab meetings and data challenges; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
protocol drift	Working higher education and research term used in lab meetings and data challenges; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
analysis assumption	Working higher education and research term used in lab meetings and data challenges; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Research Ethics and Human Subjects

Term	Working meaning
IRB	Working higher education and research term used in research ethics and human subjects; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
informed consent	Working higher education and research term used in research ethics and human subjects; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
secondary use	Working higher education and research term used in research ethics and human subjects; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
human subjects	Working higher education and research term used in research ethics and human subjects; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Authorship, Collaboration, and Credit

Term	Working meaning
authorship	Working higher education and research term used in authorship, collaboration, and credit; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
contribution	Working higher education and research term used in authorship, collaboration, and credit; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
corresponding author	Working higher education and research term used in authorship, collaboration, and credit; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
acknowledgment	Working higher education and research term used in authorship, collaboration, and credit; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Peer Review and Revision Responses

Term	Working meaning
peer review	Working higher education and research term used in peer review and revision responses; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Term	Working meaning
major revision	Working higher education and research term used in peer review and revision responses; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
response letter	Working higher education and research term used in peer review and revision responses; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
scope	Defined boundary of work, responsibility, deliverables, assumptions, and exclusions.

Data Management and Reproducibility

Term	Working meaning
metadata	Working higher education and research term used in data management and reproducibility; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
repository	Working higher education and research term used in data management and reproducibility; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
provenance	Working higher education and research term used in data management and reproducibility; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
reproducibility	Working higher education and research term used in data management and reproducibility; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Academic Presentations and Conferences

Term	Working meaning
generalizability	Working higher education and research term used in academic presentations and conferences; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
limitation	Working higher education and research term used in academic presentations and conferences; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
future work	Working higher education and research term used in academic presentations and conferences; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.
conference Q&A	Working higher education and research term used in academic presentations and conferences; define the owner, evidence source, governing document, risk, and decision impact before using it in a meeting.

Industry-Specific Meeting Moves

Situation	Useful language
Research Questions and Study Design	Before we commit, I want to confirm research question, hypothesis, the owner, and the evidence behind the decision. If hypothesis, design, sample, limitations, and inference must be aligned., I recommend we document the risk and agree on the next step.
Grant Proposals and Specific Aims	Before we commit, I want to confirm specific aims, significance, the owner, and the evidence behind the decision. If feasibility, significance, innovation, approach, and milestones need balance., I recommend we document the risk and agree on the next step.
Lab Meetings and Data Challenges	Before we commit, I want to confirm control, replication, the owner, and the evidence behind the decision. If controls, replication, protocol drift, and analysis assumptions need review., I recommend we document the risk and agree on the next step.
Research Ethics and Human Subjects	Before we commit, I want to confirm IRB, informed consent, the owner, and the evidence behind the decision. If consent, irb approval, privacy, and secondary-use rules may apply., I recommend we document the risk and agree on the next step.

Situation	Useful language
Authorship, Collaboration, and Credit	Before we commit, I want to confirm authorship, contribution, the owner, and the evidence behind the decision. If contribution, criteria, order, acknowledgments, and publication norms must be explicit., I recommend we document the risk and agree on the next step.
Peer Review and Revision Responses	Before we commit, I want to confirm peer review, major revision, the owner, and the evidence behind the decision. If tone, evidence, scope, feasibility, and transparent limitations matter., I recommend we document the risk and agree on the next step.
Data Management and Reproducibility	Before we commit, I want to confirm metadata, repository, the owner, and the evidence behind the decision. If metadata, code, provenance, privacy, and repository requirements need attention., I recommend we document the risk and agree on the next step.
Academic Presentations and Conferences	Before we commit, I want to confirm generalizability, limitation, the owner, and the evidence behind the decision. If population, context, method, and future work should be addressed calmly., I recommend we document the risk and agree on the next step.

High-pressure pushback frames

- I understand the urgency. The risk is that we move faster than the evidence or process supports.
- I am not blocking the goal. I am naming the condition we need before the decision is safe and credible.
- If we accept this risk, we should name the owner, document the assumption, and define the trigger for escalation.
- That may be possible, but not under the current scope, timeline, or approval path.
- Let's separate what we know, what we assume, and what still needs confirmation.

Assessment and Coaching

Performance rubric

Skill	Developing	Proficient	Strong
Terminology	Recognizes terms but uses them loosely.	Uses field terms accurately in context.	Defines terms, connects them to evidence, and explains decision impact.
Pushback	Disagrees vaguely or avoids disagreement.	Names concern with evidence and next step.	Balances urgency, relationship, risk, owner, and decision rights.
Scenario judgment	Focuses on one stakeholder's preference.	Identifies constraint, risk, and process.	Guides the group toward a documented, realistic decision.
Written output	Writes general summaries.	Produces clear notes with facts and owner.	Creates concise, decision-ready workplace communication.

Source orientation

- Institutional research policies and IRB guidance.
- Grant-funder instructions and journal requirements.
- Field norms for authorship, data, and reproducibility.
- The learner's own company policies, SOPs, contracts, systems, templates, and approved communication standards.