Module summary
The main goal of the lecture is to make students familiar with practical methods of preparation of research papers for high impact factor ISI List journals from Q1, Q2, and Q3 quartiles, methods for the preparation of letters with answers to reviewer’s comments, and methods for papers revisions. In particular, during the lecture, we will present examples of papers, revisions, and answers to the reviewer’s comments selected from 50 different papers from 20 different Q1, Q2, and Q3 journals.

Description of learning outcomes for module

<table>
<thead>
<tr>
<th>MLO code</th>
<th>Student after module completion has the knowledge/ knows how to/is able to</th>
<th>Connections with FLO</th>
<th>Method of learning outcomes verification (form of completion)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social competence: is able to</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>M_K001</td>
<td>He is able to discuss with co-authors improvements and revisions for a high-quality research paper targeting Q1, Q2, Q3 journal, using the scientific arguments and ethics.</td>
<td>SDA3A_K01, SDA3A_K03, SDA3A_K02</td>
<td>Activity during classes</td>
</tr>
<tr>
<td>M_K002</td>
<td>He is able to discuss critics of his paper targeting Q1, Q2, Q3 journals, using scientific arguments, ethics and research discussion, avoiding unnecessary emotions.</td>
<td>SDA3A_K01, SDA3A_K03, SDA3A_K02</td>
<td>Activity during classes</td>
</tr>
<tr>
<td><strong>Skills: he can</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M_U001</td>
<td>He can identify journals from ISI List from Q1, Q2, Q3 quartiles for a given scientific discipline.</td>
<td>SDA3A_U07, SDA3A_U06, SDA3A_U03, SDA3A_U05</td>
<td>Scientific paper</td>
</tr>
<tr>
<td>M_U002</td>
<td>He can lead a critical scientific discussion concerning a given research topic, referring to the actual state of the art, with high-quality scientific standards and ethics.</td>
<td>SDA3A_U02, SDA3A_U01, SDA3A_U04</td>
<td>Presentation</td>
</tr>
<tr>
<td>M_U003</td>
<td>He can write a reliable letter with the answer to the reviewers' comments referring to a research paper from Q1, Q2, Q3 journal, using high-level scientific arguments, ethics, and the state of the art.</td>
<td>SDA3A_U06, SDA3A_U02, SDA3A_U03, SDA3A_U05, SDA3A_U01, SDA3A_U04</td>
<td>Presentation</td>
</tr>
<tr>
<td>M_U004</td>
<td>He can write a high-quality research paper targeting Q1, Q2, Q3 journals, with proper structure, including the introduction, state of the art, main research thesis, methodology, and numerical results/experiments.</td>
<td>SDA3A_U06, SDA3A_U03, SDA3A_U05</td>
<td></td>
</tr>
<tr>
<td>M_U005</td>
<td>He can write a review of a research paper taking into account actual state of the art, as well as check the requirements necessary a publication in high-quality Q1, Q2, Q3 journals.</td>
<td>SDA3A_U02, SDA3A_U05, SDA3A_U01, SDA3A_U04</td>
<td>Presentation</td>
</tr>
</tbody>
</table>

**Knowledge: he knows and understands**

| M_W001 | He knows and understands the classification of high-quality scientific journals within Q1, Q2, Q3 quartiles, rules for indexing journals in different data-bases, rules for estimating impact factor przypisywania impact factor, as well as methods for assigning points for publications. | SDA3A_W02, SDA3A_W04, SDA3A_W01 | Presentation |
| M_W002 | He knows and understands methods and tools of searching for actual, state of the art, important from the point of view of science, scientific papers for a given scientific discipline. | SDA3A_W03, SDA3A_W05, SDA3A_W06 | Activity during classes |

### Number of hours for each form of classes

<table>
<thead>
<tr>
<th>Form of classes</th>
<th>Suma</th>
<th>Lectures</th>
<th>Auditorium classes</th>
<th>Laboratory classes</th>
<th>Project classes</th>
<th>Conversation seminar</th>
<th>Seminar classes</th>
<th>Practical classes</th>
<th>Fieldwork classes</th>
<th>Workshops</th>
<th>Prace kontrolne i przejściowe</th>
<th>Lektorat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suma</td>
<td></td>
<td>28</td>
<td>14</td>
<td>14</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### FLO matrix in relation to forms of classes

<table>
<thead>
<tr>
<th>MLO code</th>
<th>Student after module completion has the knowledge/ knows how to/is able to</th>
<th>Form of classes</th>
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</thead>
</table>

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<table>
<thead>
<tr>
<th>Module card - Strategy of research papers preparation and revision for high impact factor ISI List journals</th>
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<td><strong>M_K001</strong> He is able to discuss with co-authors improvements and revisions for a high-quality research paper targeting Q1, Q2, Q3 journal, using the scientific arguments and ethics.</td>
</tr>
<tr>
<td>Lectures</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td><strong>M_K002</strong> He is able to discuss critics of his paper targeting Q1, Q2, Q3 journals, using scientific arguments, ethics and research discussion, avoiding unnecessary emotions.</td>
</tr>
<tr>
<td>-</td>
</tr>
</tbody>
</table>

Skills: he can

| **M_U001** He can identify journals from ISI List from Q1, Q2, Q3 quartiles for a given scientific discipline. |
| Lectures | Auditorium classes | Laboratory classes | Project classes | Conversation | Seminar | Practical classes | Fieldwork classes | Workshops | Prace kontrolne i przejściowe | Lektorat |
| + | - | + | - | - | - | - | - | - | - | - |
| **M_U002** He can lead a critical scientific discussion concerning a given research topic, referring to the actual state of the art, with high-quality scientific standards and ethics. |
| + | - | + | - | - | - | - | - | - | - | - |
| **M_U003** He can write a reliable letter with the answer to the reviewers' comments referring to a research paper from Q1, Q2, Q3 journal, using high-level scientific arguments, ethics, and the state of the art. |
| + | - | + | - | - | - | - | - | - | - | - |
| **M_U004** He can write a high-quality research paper targeting Q1, Q2, Q3 journals, with proper structure, including the introduction, state of the art, main research thesis, methodology, and numerical results/experiments. |
| + | - | + | - | - | - | - | - | - | - | - |
| **M_U005** He can write a review of a research paper taking into account actual state of the art, as well as check the requirements necessary a publication in high-quality Q1, Q2, Q3 journals. |
| + | - | + | - | - | - | - | - | - | - | - |

Knowledge: he knows and understands
Module card - Strategy of research papers preparation and revision for high impact factor ISI List journals

| M_W001 | He knows and understands the classification of high-quality scientific journals within Q1, Q2, Q3 quartiles, rules for indexing journals in different databases, rules for estimating impact factor przypisywania impact factor, as well as methods for assigning points for publications. | + | - | + | - | - | - | - | - | - |
| M_W002 | He knows and understands methods and tools of searching for actual, state of the art, important from the point of view of science, scientific papers for a given scientific discipline. | + | - | + | - | - | - | - | - | - |

**Student workload (ECTS credits balance)**

<table>
<thead>
<tr>
<th>Student activity form</th>
<th>Student workload</th>
</tr>
</thead>
<tbody>
<tr>
<td>Udział w zajęciach dydaktycznych/praktyka</td>
<td>28 h</td>
</tr>
<tr>
<td>Preparation for classes</td>
<td>28 h</td>
</tr>
<tr>
<td>przygotowanie projektu, prezentacji, pracy pisemnej, sprawozdania</td>
<td>28 h</td>
</tr>
<tr>
<td>Summary student workload</td>
<td>84 h</td>
</tr>
<tr>
<td>Module ECTS credits</td>
<td>3 ECTS</td>
</tr>
</tbody>
</table>

**Additional information**

**Module content**

**Lectures**

Evaluation of scientific journals
ISI Lists, quartiles, journals Q1, Q2, Q3, Q3, Q3, Web of Science, Impact Factor, Scimago, h-index, SCOPUS, Google Scholar, scientific journals list and points of journals in Poland, the relation between scientific publications and research carrier, Highly Cited Researchers, preface papers, paid journals, predatory journals

Preparation and revision of research papers for Q3 journals
Examples of preparation and revision of research papers from Q3 journals (selected examples from journals Parallel Computing, Concurrency and Computations: Practise and Experience, Computational Geosciences, Scientific Programming)

Preparation and revision of research papers for Q2 journals
Examples of preparation and revision of research papers from Q2 journals (selected examples from journals Computer & Physics Communications, Journal of Parallel and Distributed Computing, Fundamenta Informaticae, SIAM Journal on Applied Mathematics, Journal of Computational Science, Engineering with Computers, Computer Methods in Biomechanics and Biomedical Engineering)

Rules for preparation of papers for Q1 journals
Main scientific goal of the paper, state of the art, from presentation to plan of the
paper, guidelines for writing a high quality text for a research paper, guidelines for producing a high quality graphics, selection of citations and acknowledgements, rules for communications with co-authors, ethics for writing of research papers, ethics of selecting of citations and acknowledgements

Rules for writing letters with answers to reviewers comments, rules for papers revisions
Creation of letter with answers to reviewers comments, planning of revisions in the paper, politics of answering to reviewers comments, distinguishing scientific arguments and emotions during the scientific discussion, ethics for the writing of letters with answers to reviewers comments.

Examples of letters with answers to reviewers comments and revisions of papers submitted to Q1 journals
Examples of letters with answers to reviewers comments and revisions of papers submitted to Q1 journals (selected examples from journals Computer Methods in Applied Mechanics and Engineering, Computers and Mathematics with Applications, Applied Soft Computing, IEEE Transactions on Parallel and Distributed Systems)

Rules for writing revisions of papers
Politics of writing of revisions of papers. Identification of the main research goal of the paper. Identification of proper state of the art and citations. Evaluation of the research methodology. Evaluation of the correctness of the numerical results and experiments. Ethics in writing the reviews.

Laboratory classes
Identification of journals from Q1, Q2, and Q3 quartiles including a given research topics
How to find proper journals from Q1, Q2, and Q3 for a given research topic. How to evaluate well journal quality. How to find a journal proper for a scientific level and research topic of a paper. Politics of selecting a journal for a research paper.

Open discussion on guidelines documents
Open discussion on the following documents: a) checklist to do for writing a paper revision, b) guidelines for producing high-quality graphics c) guidelines to prepare and give a presentation, d) checklist to do before sending a written text

Identification of state-of-the-art in a given research topic
Identification of state-of-the-art in a given research topic. How to place your research paper with respect to other research papers in a given discipline. Methods of finding references. Methods for writing the state-of-the-art chapter. Ethics of citations

Identification of the main research topic of the paper
Identification of the main research topic of the paper. How to write an abstract and plan for the research paper. From presentation to plan of a research paper. Preparation of a plan of presentation describing a research paper. Politics and ethics of selecting of co-authors of a research paper.

Preparation of selected parts of research paper
Preparation of selected parts of a research paper (e.g. introduction, conclusions, methodology). Preparation of graphics for a research paper.

Politics of revision of a research paper
Politics of revision of a research paper. Preparation of the letter with answers to reviewers comments. Decisions and politics of answers for reviewers remarks. Distinguishing between scientific arguments and emotions in research discussions. Ethics in writing revisions of research papers.
Preparation of review of a paper
How to find weak points of a research paper. Identification of the main goal of the research paper. Preparation of review of a research paper. Distinguishing between scientific arguments and emotions in research discussions. Ethics in writing reviews of research papers.

Teaching methods and techniques:
Lectures: Lecture: The topics are presented in the form of the multi-media presentation, together with open discussions with lecture audience concerning the presented subjects.
Laboratory classes: Laboratory classes include preparations and presentation of selected parts of research papers, revisions, and reviews, as well as elements of communications with editors and reviewers, together with open discussions on presented topics.

Warunki i sposób zaliczenia poszczególnych form zajęć, w tym zasady zaliczeń poprawkowych, a także warunki dopuszczenia do egzaminu:
The final grade is given based on presentations made by students concerning selected topics including e.g. 1. List of journals from Q1, Q2, and Q3 quartiles for a given research topic 2. List of papers describing state of the art for a given research topic 3. Abstract for a research paper 4. Plan of the research paper 5. The review of the research paper 6. The letter with answers to reviewers comments.

Zasady udziału w poszczególnych zajęciach, ze wskazaniem, czy obecność studenta na zajęciach jest obowiązkowa:
Lectures:
- Attendance is mandatory: No
- Participation rules in classes: Lecture: the attendance according to the general rules is not obligatory, however, it is highly recommended.
Laboratory classes:
- Attendance is mandatory: Yes
- Participation rules in classes: Laboratory classes: Obligatory attendance. The final grade is based on students presentations and activities in discussions.

Method of calculating the final grade
1. The final positive grade is based obtained when students get a positive grade from laboratories.
2. Students get partial grades from presentations of selected parts of the prepared research paper. The final grade is an average of the partial grades.
3. The final grade is given based on the following algorithm:
   if sr>4.75 then OK:=5.0 else
   if sr>4.25 then OK:=4.5 else
   if sr>3.75 then OK:=4.0 else
   if sr>3.25 then OK:=3.5 else OK:=3
4. If the positive grade is obtained on the required deadlines, the final grade is upgraded by 0.5

Sposób i tryb wyrównywania zaległości powstałych wskutek nieobecności studenta na zajęciach:
The missing grades can be obtained during individual office hours with teaching professor

Prerequisites and additional requirements
The intention to write a high-quality research paper to the highly cited journal from ISI List

Recommended literature and teaching resources
https://www.webofknowledge.com/
https://scholar.google.com/
https://www.scopus.com/
Scientific publications of module course instructors related to the topic of the module

2019:

2018:

2017:

2015:
[16] Agent-based simulations, adaptive algorithms, and solvers, Maciej Paszyński, Journal of


[22] Graph transformation systems for modeling three-dimensional finite element method, Pt. 1, Iwona Ryszka, Anna Paszyńska, Ewa Grabska, Marcin Sieniek, Maciej Paszyński, Fundamenta Informaticae, 140(2) (2015) 129–172, journal Q2, IF: 0.658


[27] Quasi-Optimal Elimination Trees for 2D Grids with singularities, // Anna Paszynska, Maciej Paszyński, Konrad Jopek, Maciej Wozniak, Damian Goik, Piotr Gurgl, Hassan AbouEisha, Mikhail Moshkov, Victor Calo, Andrew Lenharth, Donald Nguyen, Keshav Pingalli, Scientific Programming (2015), journal Q3, IF: 0.667

2014:


[33] A direct solver with reutilization of previously-computed LU factorizations for h-adaptive finite element grids with point singularities, Maciej Paszyński, Victor Calo, David Pardo, Computers and Mathematics with Applications, 65, 8 (2013) 1140-1151, journal Q1, IF: 2.81

[34] A graph grammar model of the hp-adaptive three-dimensional Finite Element Method. P. 2, Anna Paszyńska, Ewa Grabska, Maciej Paszyński, Fundamenta Informaticae, 114(2) (2012) 183-201, journal Q2, IF: 0.658


2012:

[38] A Graph Grammar Model of the hp Adaptive Three Dimensional Finite Element Method. Part II / A. Paszyńska, E. Grabska, M. Paszyński, Fundamenta Informaticae,114 (2012) journal Q2, IF: 0:658
2011:
2010:
2009:
2008:
2007:
2006:
2005:
[55] The Modified Fluid-Particle Model for non-linear Casson Fluid and its parallel distributed
implementation, Maciej Paszynski, Robert Schaefer, Computer Methods in Applied Mechanics and
Engineering, 194 (2005) 4386-4410, journal Q1, IF: 4.17
[56] Verification of goal-oriented HP adaptivity, Maciej Paszyński, Leszek Demkowicz, David Pardo,

Additional information
It is recommended to bring and show your own research papers in order to get suggestions for
improvements/hints for revisions/hints for writing letters with answers to reviewers comments